LITERATURE OF MANUFACTURERS

Catalogues, bulletins, and direct advertising material recently issued. Manufacturers are requested to send copies of new trade literature promptly to Electric Refrigeration News.

Acme

A folder has been received from the Acme Refrigeration Corp. 167 Front St., New York, N. Y., showing Acme automatic refrigerating equipment manufactured by the Erie Manufacturing Corp., Erie, Pa. Five different models of condensing units are shown, ranging in refrigerating capacities from one-half to five tons ice melting effect per 24 hours. These machines are of the reciprocating type and have from two to four cylinders.

Ice-O-Matic

Six direct mail pieces have been received from the Williams Oil-O-Matic Heating Corp., Bloomington, Ind. Two folders done in colors, stress the cooling efficiency of the Ice-O-Matic unit and tell of the advantages of its use. Four folders are devoted to the Oil-O-Matic oil burner.

Gunite

A booklet containing the story of Gunite steel has been issued by the Gunite Corp., Rockford, Ill. The process of the manufacture of Gunite is described and a number of microphotographs comparing the graphic steel with ordinary steel are shown.

Roller-Smith

The Roller-Smith Co., 233 Broadway, New York, N. Y., manufacturers of electrical measuring apparatus, sends in a booklet showing three types of portable, direct reading ohmmeters and a portable, direct reading circuit tester.

COPELAND ADDS NEW WATER COOLER TO LINE

A new water cooler, designed specifically to meet the demand for a small, low-priced cooler for loan, rental or sales purposes by spring water or filter water companies who supply water and coolers to the public, has just been added to its line by the Copeland Products, Inc., Detroit.

The new cooler, to be known as the model P, will be finished in white only, except on special order. It will have a water capacity of five gallons to fit the standard five gallon bottles. A Copeland model S compressor, a special small, single cylinder machine operated by a 1/6 H. P. motor is provided. This compressor is built especially for water cooler purposes, is said to be exceedingly quiet, economical in operation and accessible for service. A porcelain bucket, provided for drainage, is easily accessible through a door in the lower front panel.

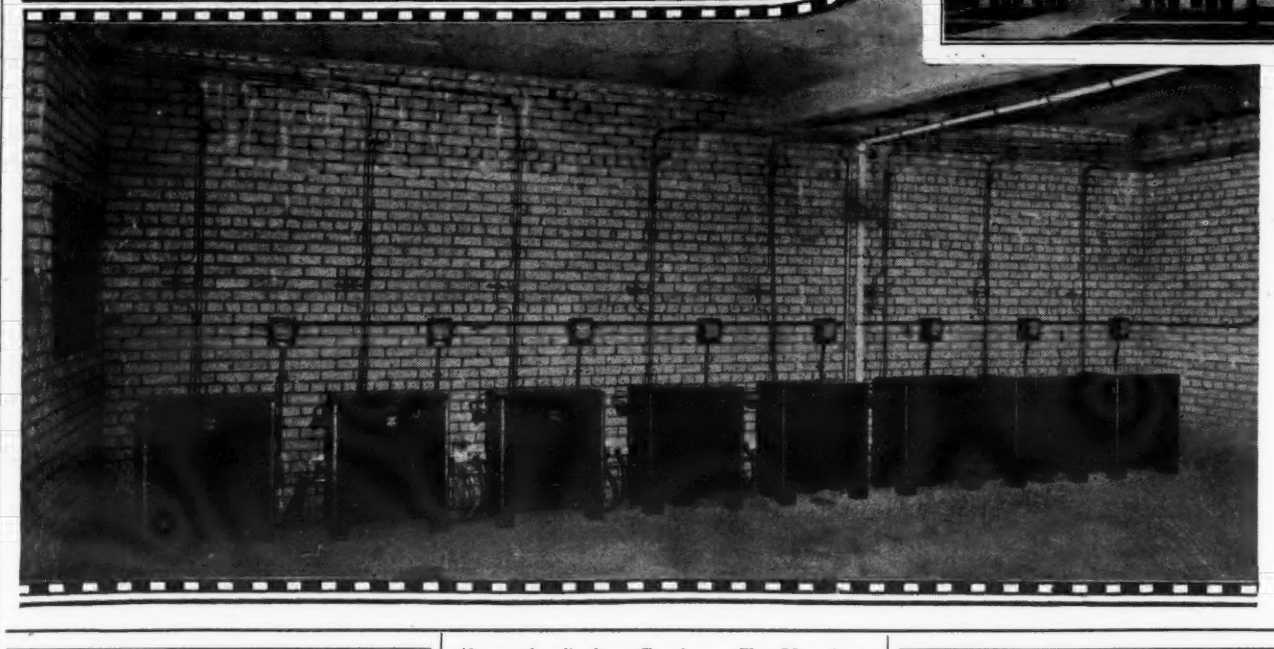
A large percentage of the spring and filter water companies of the country are considering plans to rent electric coolers, to their customers, instead of supplying an ice cooler and having that customer buy ice. In many cities companies are already placing electric coolers with their customers on rental basis.

Greensboro Central Station Opens New Frigidaire Display Room

The Home Light & Power Co., Greensboro, N. C., opened a new Frigidaire display room in Greensboro on July 5. Public receptions were held for three days and refreshments and favors were given to all who attended the formal opening.

Neat Workmanship Characterizes Installation of Multipled Nizers

Battery of 8 Model IR Nizers serving 99 apartments in the "Roselawn Heights" owned by Rosenberg & Kaplan at Highland and Second Avenues, Detroit. The installation was made by the Dalrymple-Kelvinator Co., distributors at 2842 West Grand Blvd., Detroit. The Nizer units are water cooled thereby eliminating the problem of basement ventilation. All copper tubing is in conduit after leaving the refrigeration room. The loops near the ceiling prevent the transmission of vibration from the compressors to the apartments above.



REQUESTS FOR INFORMATION

Readers who can assist in furnishing correct answers to inquiries or who can supply additional information are invited to address Electric Refrigeration News, referring to the query number.

Vice-Consul in Africa Wants Small Iceless Ice Cream Freezers

Query No. 115—Oscar Thomason, American vice-consul in Nairobi. Colony of Kenya, Africa, writes as follows:

"I am personally interested in trying to find an ice cream freezer of about four or six quart capacity, one that is operated with chemicals or by electricity similarly to the refrigerators.

"Ice, in East Africa, is difficult to obtain and is very expensive and there are a number of Americans here who miss their ice cream and would appreciate having a freezer operated by some method other than ice.

"I have looked through several numbers of the NEWS, but can find no advertisement of the kind of freezer I want. I have assumed that you might know of such a machine and could put me into communication with a manufacturer.

"Literature and price lists would be appreciated at this Consulate."

Books on Refrigeration

Query No. 116—A St. Paul company writes as follows: "Will you kindly inform us of any book or bulletin that treats upon electrical refrigeration?"

Note: Orders for the following books may be sent to ELECTRIC REFRIGERATION NEWS. Please send remittance with order. —Editor.

"Household Refrigeration," by H. B. Hull. Treatise on the principles, types, construction and operation of both ice and mechanically cooled refrigerators and the use of ice and refrigeration in the home. In cloth, $3.50.

"Practical Refrigerating Engineer's Handbook," by John E. Starr. This pocketbook is an elementary treatise, supplemented with numerous tables containing data on the design, construction and operation of mechanical refrigerating systems. In cloth, $2.50.

"Refrigerating Machines, Compression—Absorption," by Gardner T. Voorhess. Comparison of capacities and economies of compression and absorption systems. In cloth, $2.00.

"Principles of Mechanical Refrigeration," by W. H. Motz. Complete subject of mechanical refrigeration presenting the fundamental principles to the more advanced operating conditions. In cloth, $5.00.

Request Data on Patented Door Construction

Query No. 117—"Some time past, I noticed an article in your paper relative to some gentleman making application for a patent on a method of installing glass in refrigerators to eliminate sweating or condensation. Any information you can give on the subject will be appreciated."—M. T. D., Arkansas.

The patent referred to is No. 1,629,408, dated May 17, 1927, and issued to Albert Peacock, Rome, Ga.

RECOMMENDS WRAPPING OF FOODS IN HEAVY WAXED PAPER

The Electric Refrigeration department of the General Electric Co., is recommending the use of Minerva heavy wax paper to all its dealers and distributors as one of the methods for retaining the moisture and freshness of food stored in the electric refrigerator.

In a dealer bulletin received from the F. B. Connelly Co., Billings, Mont., distributor of General Electric refrigerators, Miss Alice Brady is quoted as follows:

"We have kept cooked meats wrapped in wax paper for a week in the electric refrigerator and they were not dried out, but were perfectly all right for use at the end of that time. Celery has kept for a week wrapped in the paper. Iceberg lettuce and cucumbers were preserved very well. Any vegetable that is firm enough so that it may be wrapped in paper and tied with a string keeps very nicely."

Arrangements have been made for General Electric dealers to obtain this paper bearing their own imprint. This imprint appears every twenty-four inches on the roll. It is suggested that dealers supply the first roll gratis with each new refrigerator delivered.

NEW DEALERS & DISTRIBUTORS

Recent appointments announced by manufacturers and new sales outlets reported from the field.

Welsbach

Distributors: R. I. Uulmer Electric Co., 212 S. Sandusky Ave., Bucyrus, Ohio; H. D. Raiche, Neenah, Wis.; Snyder Electric Co., 118 S. Edward St., Kalamazoo, Mich.; Stone & Meech, Rochester, N. Y.; Vernon M. Trescott, 1117 Charles St., Baltimore, Md.

Associate dealers under distributors: Arthur R. Daigle, Fort Kent, Me.; R. W. Wight, Presque Isle, Me.; A. H. Bowden, 6 N. Main St., Caribou, Me.

Display dealers under branches: Straubling Electric Co., 170 West Ave., Salamanca, N. Y., Goldenson's, 1214 Carson St., Pittsburgh, Pa.

Servel

Distributors: Enco Products, Inc., 698 Main St., Buffalo, N. Y. (Servel-Electrolux); Iceless Refrigeration, Inc., 150 Sunrise Highway, Rockville Center, L. I., N. Y. (Servel-Electrolux).

Dealers: Hanson Battery and Electric Service, Warren, Pa. (Servel-Electrolux); E. J. Baker, Punxsutawney, Pa. (Electrolux); Anderson Electric Co., Mantowoc, Wis. (Servel); Heskamp & Klenke, Spearville, Kan. (Servel-Eelectrolux).

"PLEASE CHANGE MY ADDRESS"

Recent movements of Electric Refrigeration News subscribers as indicated by requests for changes in mailing addresses.

Apgar, R. H., from 189 Roseville Ave., Newark, N. J., to 165 Main St., Madison, N. J.

Arnold, Clifford H., from 1368 Commonwealth Ave. to 7 Scottfield Rd., Allston, Mass.

Arnold, Ray, from 131 3rd St. to 121 2nd St., Milwaukee, Wis.

Auer-Hay & Knoblock, from 417 W. Colfax Ave. to 1011 So. Michigan St., South Bend, Ind.

Bolton, Glen, from 20 Clifton Ave. to 19 Woodrow Rd., Batavia, N. Y.

Brandel, O. A., from 2308 W. Seventh St. to Room 207 Wilshire La Brea Bldg., Los Angeles, Calif.

Browne, Herbert W., from 1018 Allen Bldg., Dallas, Texas, to Nash Hardware Co., Fort Worth, Texas.

Corliss, F. M., from 217 Brandywine Ave., Schenectady, N. Y. to General Electric Co., Electric Refrigeration Dept., Hanna Bldg., Cleveland, Ohio.

Dargert, Henry D., from 421 E. Philadelphia Ave., Detroit, Mich., to c-o O'Keefe & Merritt Co., 3700 Mines Ave., Los Angeles, Calif.

Domestic Engineering Corp., from 817 Mission St. to 450 Clementine St., San Francisco, Calif.

Downey, Harold L., from 410 W. 34th St. to c-o Copeland Refrigeration Co. of New York, Inc., 480 Lexington Ave., New York, N. Y.

Ericson, S. A., from 8815 S. Laflin St. to 8815 S. Justine St., Chicago, Ill.

Gibson, J. L., from 464 Sandalwood Drive to 424 Sandalwood Drive, Dayton, Ohio.

Glueck & Co., from 3312 Broadway to 812 Dwight Bldg., Kansas City, Mo.

Henney, Chas. F., from 42 Central Ave. to 31 Central Ave., Dayton, Ohio.

Herzstam, Joseph, from 535 Seary St., San Francisco, Calif., to 207-9 Wilshire La Brea Bldg., Los Angeles, Calif.

Jones L. Latta, from 3237 Queens Blvd., Long Island City, N. Y., to 8615 Evergreen Place, Chestnut Hill, Philadelphia, Pa.

Keller, A. W., from Maas & Waldstein Co., 45 John St., New York, N. Y., to Mass & Waldstein Co., 438 Riverside Ave., Newark, N. J.

Kelly, Edward J., from 938 Albany St. to 937 Emmett Street, Schenectady, N. Y.

Knight, J. P., from 7715 Waring Ave. to 612½ N. Genesee St., Sta. S. Los Angeles, Calif.

Lukens, Charles C., from Frigidaire Co., 4160 Drexel Blvd. to 310 S. Michigan Ave., Chicago, Ill.

Merritt, Earle E. H., from 131 3rd St. to 121 2nd St., Milwaukee, Wis.

Mook, Edward C., from 1709 Townsend Ave. to 185 No. Manistique Ave., Detroit, Mich.

Petley, B., from Petley Carver Corp., 461 Milwaukee St., Milwaukee, Wis., to 1935 8th Ave., Los Angeles, Calif.

Post, W. L., from 151 1st Ave. to 1356 E. 17th South, Salt Lake City, Utah.

Scott, F. L., from R. F. D. No. 4, Box 117B, to 1201 S. Quaker, Tulsa, Okla.

Sorenson, E. J., from 233 Lake Lawn Pl., Madison, Wis., to 42 30th St., Milwaukee, Wis.

Starke, Arthur H., from 89 Montclair Ave., Newark, N. J., to 16 Bamford Place, Irvington, N. J.

Tice, Egbert, from Frigidaire Corp., 93 Gibbs St., New Haven, Conn., to R. F. D. No. 1, Box 115, Woodbridge, Conn.

Underwood, Fred E., from Union Heating & Refrig. Co., Inc., 109 West Second St. to 21 West Second St., Jamestown, N. Y.

Weis, H., Jr., from Iroquois Co. of Missouri, 3546 Washington Blvd. to 2835 Washington Ave., St. Louis, Mo.

Wood, E. Ellsworth, from 60 West State St. to Box 141, Battle Creek, Mich.

Reliable TRADE MARK
CORKBOARD
Manufactured by
Luse-Stevenson Co. 307 N. Mich. Ave., Chicago

THE CONDENSER

ADDRESS REPLIES to box advertisements to Electric Refrigeration News, 554 Maccabees Building, Detroit, Mich.

ADVERTISING RATE fifty cents per line (this column only).

SPECIAL RATE if paid in advance —Positions Wanted—fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion $3.00, additional words six cents each. Three insertions $8.00, additional words sixteen cents each.

POSITIONS WANTED

ENGINEERING EXECUTIVE

Connected with electric refrigeration for ten years, desires connection with responsible manufacturer in temporary or permanent capacity as consulting or chief engineer. Capable of taking complete charge of engineering and manufacturing. Inventor and owner of widely used patents. Well acquainted with patent situation. Box 52.

I am anxious to make connection with large distributor as general manager or sales manager. Forty-three years old, married. Confident interview will convince as to ability, character, etc. Box No. 91.

POSITIONS AVAILABLE

We offer a splendid opportunity to an energetic hustler to take complete charge of our nationally known and advertised line of electric refrigerating cabinets in the New York Metropolitan district. Write stating qualifications, experience, references, etc. Box 96.

FOR SALE

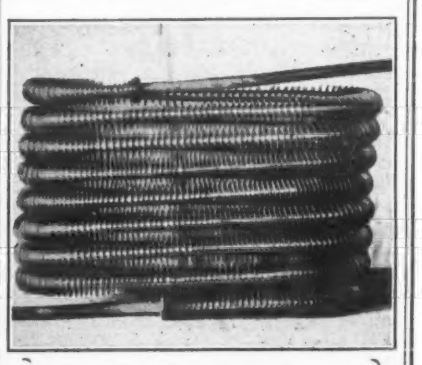
ATTENTION KELVINATOR DEALERS! We have three ¾ compressors and two tanks which we will sell at a very low price. They are in excellent shape. Complete details will be furnished on request. McConnell Richards, Inc., 27 Warren Street, Glens Falls, N. Y.

Refrigeration Service Co., Inc.
SERVICE SPECIALISTS—Installations, Alterations, Repairs, Inspection, Reconditioning, Maintenance
New York City Tel.: Chickering 0460
Nights, Sundays or Holidays, Susquehanna 4500
Office and Works 449 West 42nd St. Warehouse 281 11th Ave.

DRINKING WATER FAUCETS
for
Refrigerators - - Water Coolers
Cordley & Hayes
1 Leonard St. New York City

Distinctive Refrigeration Hardware
PATENTED TRIPLOCK
Winters & Crampton Mfg. Co., Grand Rapids, Mich.

REFRIGERATION PATENTS
SPECIALIST IN HOUSEHOLD MACHINES AND WATER COOLERS, INVESTIGATIONS, REPORTS, SEARCHES. SPECIAL ATTENTION PAID TO ASSOCIATE WORK.
H. R. VAN DEVENTER
SOLICITOR OF PATENTS
342 Madison Ave.
NEW YORK CITY



ROME CONDENSERS
are formed in any shape of one piece of seamless copper tubing, fitted with heavy gauge copper radiating fin. Rome condensers are five times as efficient as plain tubes
Rome-Turney Radiator Company
ROME, N. Y.

LASSEN — TEMPERATURE — PRESSURE — **CONTROLS**
POSITIVE RANGE AND DIFFERENTIAL ADJUSTMENT
NON-DETERIORATING MERCURY TUBE SWITCH—MEET ALL REQUIREMENTS
GOODNOW & BLAKE MFG. CO. 3840 BEAVER STREET DETROIT, MICH.

Subscription Order

ELECTRIC REFRIGERATION NEWS,
554 MACCABEES BUILDING, DETROIT, MICH.

Please enter my subscription to Electric Refrigeration News.

United States and Possessions:

☐ $1.50 per year. ☐ Three years for $3.00.
(After Sept. 12—$2.00 per year, 3 years for $5.00)

All other Countries:

☐ $1.75 per year. ☐ Two years for $3.00.
(After Sept. 12—$2.25 per year, 2 years for $4.00)

I am enclosing payment in the form of

☐ Check ☐ P. O. Order ☐ Cash

Name_____

Street Address_____

City and State_____

Remarks:_____

ELECTRIC REFRIGERATION NEWS

The business newspaper of the electric refrigeration industry

VOL. 2, NO. 25, SERIAL NO. 49 | Copyright 1928 by Business News Pub. Co. | DETROIT, MICHIGAN, AUGUST 15, 1928 | Entered as second class matter August 1, 1927, at the Post Office, Detroit, Michigan. | PRICE TEN CENTS

FRIGIDAIRE DROPS 4 CLAIMS IN SUIT AGAINST ABSOPURE

Files Amended Bill of Complaint in Patent Litigation

CONSIDERABLE interest has been aroused among those closely following the patent litigation between Frigidaire Corp. and the General Necessities Corp. by the filing on August 4, 1928, of an amended bill of complaint in which only three of the seven patents in the original claim of infringement are specified.

The motion is ostensibly intended to secure permission of the court to name the Frigidaire Corp. as the plaintiff instead of the Delco Light Co., the original suit having been filed in the name of the Delco Light Co. before the Frigidaire business was separated from the farm lighting plant operations. It is noted, however, that only patents No. 1,280,765, 1,337,175 and 1,502,914 are mentioned and that patents No. 1,281,027, 1,291,334, 1,276,450 and 1,296,879 are omitted from the document.

The motion reads as follows:

DISTRICT COURT OF THE UNITED STATES—EASTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION.

Delco-Light Company, Plaintiff, vs. General Necessities Corp., Defendant. } In Equity No. 1911

MOTION

Now comes the plaintiff, by its solicitors, and moves this court for an order permitting the filing of a supplemental and amended bill of complaint, naming and making Frigidaire Corporation, a corporation organized and existing under the laws of the State of Delaware, plaintiff in the cause in the place and stead of plaintiff, Delco Light Company, and amending the bill of complaint hereinto charge infringement upon Letters Patent of the United States in suit, Numbers 1,280,765, 1,337,175, and 1,502,914, and providing that the proceedings heretofore had and taken in the cause shall enure to the benefit of and be binding upon the said Frigidaire Corporation and the defendant, General Necessities Corporation.

CARLOS J. JOLLY,
Solicitors for Plaintiff

Filed August 4, 1928
Elmer W. Voorheis, Clerk.

MEAT DEALERS VIEW REFRIGERATION SHOW AT PHILADELPHIA

Exhibits of refrigerating machines and display cases predominated the show held in connection with the forty-third national convention of the National Association of Retail Meat Dealers in Philadelphia August 6 to August 9 at the Bellevue-Stratford hotel. Kelvinator-Philadelphia, Inc., displayed the newest Kelvinator commercial condensing units and the finned type evaporators. A water cooler was also shown.

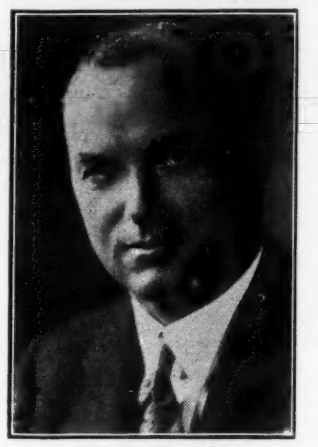
The Standard Refrigerator Co., of Philadelphia exhibited one of their type 5000 display cases and a large market refrigerator. Among the units shown by the J. J. Pocock Co., Philadelphia distributors of Frigidaire, was a model 6 water cooler, model A P 18, and A P 9 Frigidaire and a Hill case equipped with a Frigidaire unit. A cut-away domestic unit was shown in operation.

The Philadelphia Electric Co. displayed several Lipman commercial refrigerating machines, market coolers and display cases were shown by the C. V. Hill & Co., Trenton, N. J.—Ottenheimier Brothers, Baltimore, Md., and the Hussman Co., Bristol, Pa.

The York Ice Machinery Corp. had a fine exhibit of evaporators and refrigerating machinery. A unit was shown operating a Standard market cooler. The Baker Ice Machine Co., of Omaha, Neb. also exhibited refrigerating machinery.

INDEX IN NEXT ISSUE

The next issue of ELECTRIC REFRIGERATION NEWS which will be No. 26, of Volume II (Serial No. 50), will be the last issue of the second volume and will contain an index of subjects treated in the editorial columns during the past year together with an alphabetical index of companies and individuals prominently mentioned.



H. W. Foulds

FOULDS ELECTED VICE-PRESIDENT OF SERVEL SALES, INC.

H. W. Foulds, general sales manager, has been elected vice-president of Servel Sales, Inc., subsidiary of Servel, Inc., for the distribution of Servel and Electrolux automatic refrigerators, it is announced by Col. Frank E. Smith, president.

Mr. Foulds joined Servel, Inc., in March, 1926, as special representative and head of advertising. Four months later he was made advertising and export manager. He continued in that capacity until January, 1927, when he was made assistant to President Frank E. Smith. After seven months he was made responsible for the general distribution of refrigerators. With the reorganization of Servel, in January, 1928, he was made general sales manager.

An extensive and varied business career preceded Mr. Foulds' association with Servel. For one year he was representative for the *Saturday Evening Post* in New York, taking the position after six years with Fairbanks, Morse & Co., as department manager and South American representative. This connection followed several years as new business manager for the Southern Canada Power Co. at Montreal.

GAS MACHINES TO BE EXHIBITED AT AMERICAN GAS ASSOC. CONVENTION

Electrolux, Silica Gel, and other refrigerating equipment operated by gas will be exhibited at the annual convention of the American Gas Association, to be held in Atlantic City, N. J., October 8-12.

Gas utility companies are showing an active interest in refrigerating equipment operated by heat and many of the leading companies are carrying on aggressive sales and merchandising campaigns.

COUNCIL DIRECTORS MEET TO CONSIDER ASSOCIATION PLANS

OFFICERS and directors of the refrigeration manufacturers' council meet at the Detroit Athletic Club this afternoon to discuss ways and means of completing the organization which was initiated on May 9 when representatives of leading manufacturers responded to an invitation issued by A. E. Waller, managing director of the National Electrical Manufacturers Association.

Details of the discussion were not made public but a statement was issued at the close of the session to the effect that the organization of the council is going ahead and that another meeting of the directors will be held in the near future.

Those present at the meeting were President C. King Woodbridge, Secretary Howard E. Blood, Treasurer George W. Mason, and Directors Frank E. Smith and E. B. Mallory. T. K. Quinn, vice-president, was unable to attend.

COMMERCIAL MACHINES TO BE FEATURED IN AUGUST 29 ISSUE

One of the outstanding achievements of electric refrigeration during 1928 has been the great increase in the volume of sales of medium-sized commercial applications. Reports indicate particularly good business from grocers, delicatessens, meat markets, restaurants, florists, and hospitals; also water cooler installations in offices, industrial plants and public buildings; and numerous special applications.

Because of the importance of this large and profitable market which lies between the domestic field and the industrial ice making and cold storage field, ELECTRIC REFRIGERATION NEWS will give increased attention to the sales, installation and servicing phases of commercial equipment during the coming months.

The first of a series of editorial features will be a presentation of commercial refrigerating machines in the August 29 issue. All manufacturers of this type of equipment are requested to furnish data for a special section of this issue of the NEWS.

Hoover Stresses Electrical Aids to Better Living as Big Factor in U. S. Progress

FARM HOMES DESERVE EQUAL COMFORTS

Increased Use of Electricity and Machines Reduces Costs, Raises Income, Relieves Drudgery, Promotes Fuller Life and Higher Aspirations

NEVER before has the place of electricity in home and industry and particularly the significance of modern labor saving devices in the broad picture of American economic progress, been emphasized and interpreted so clearly and forcefully by a presidential candidate or in an address heard and read by so many millions of people, as in the speech of acceptance by Herbert Hoover at the Stanford University Stadium Saturday, August 11.

"Happier homes," the final words of a comprehensive analysis of the physical and spiritual status of the country, is the ideal set up as the goal of all economic development, all increased efficiency and productivity of industry.

Electrical power in the factory has increased output, shortened hours and brought higher wages which, in turn, have permitted the American family to purchase electrical appliances to relieve drudgery and brighten home life.

In addition to the specific references to electricity in its relation to higher standards of living and increased industrial efficiency, Mr. Hoover also gives attention to hydro-electric power development and public utilities.

Other points of special interest to the electric refrigeration industry are his comments on associations, scientific research, statistical service, ethical practices, and relations of government to business.

CHARLES J. GIBSON BUYS BELDING HALL FACTORY AT RECEIVER'S SALE

The plant of the Belding-Hall Electrice Corp., Belding, Mich., was sold on August 3 to Chas. J. Gibson, of the Gibson Refrigerator Co., Greenville, Mich., for a price approximating $700,000.00.

The sale is subject to the confirmation of Federal Judge Fred Raymond, who ordered the sale of the property upon the petition of creditors. The sale did not include the Electrice machine business.

The new owner of the refrigerator plant is to receive all refrigerators in stock or in process of manufacture and is to have the right to use the trade name, Belding-Hall, and the corporate name, Belding-Hall Co.

The Electrice Corp. was organized to manufacture an electric refrigeration unit and later purchased the Belding-Hall refrigeration plant, after which the main office was moved from New York City to Belding, Mich. A. E. Swanson was president of the company until it went into the hands of the receiver, Brinton F. Hall, in October, 1927. No announcement has been received regarding Mr. Gibson's plans for operating the plant at Belding.

EXTRACTS FROM HOOVER'S ACCEPTANCE ADDRESS

Effect of Inventions on Human Relationships

"Science has given us new tools and a thousand inventions. Through them have come to each of us wider relationships, more neighbors, more leisure, broader vision, higher ambitions, greater problems.

Comfort Brought to Average Family—A Test of Progress

"To me the test is the security, comfort and opportunity that has been brought to the average American family.

Consumption of Goods Increases 25 Per Cent—Population 8 Per Cent

"During this less than eight years our population has increased by 8 per cent. Yet our national income has increased by over 30 billions of dollars per year or more than 45 per cent. Our production—and therefore our consumption—of goods has increased by over 25 per cent. It is easily demonstrated that these increases have been widely spread among our whole people.

3,500,000 New and Better Homes—2,300,000 More Families

"Home ownership has grown. While during this period the number of families has increased by about 2,300,000 we have built more than 3,500,000 new and better homes.

Nine Million More Homes Equipped With Electricity

"In this short time we have equipped nearly nine million more homes with electricity, and through it drudgery has been lifted from the lives of women.

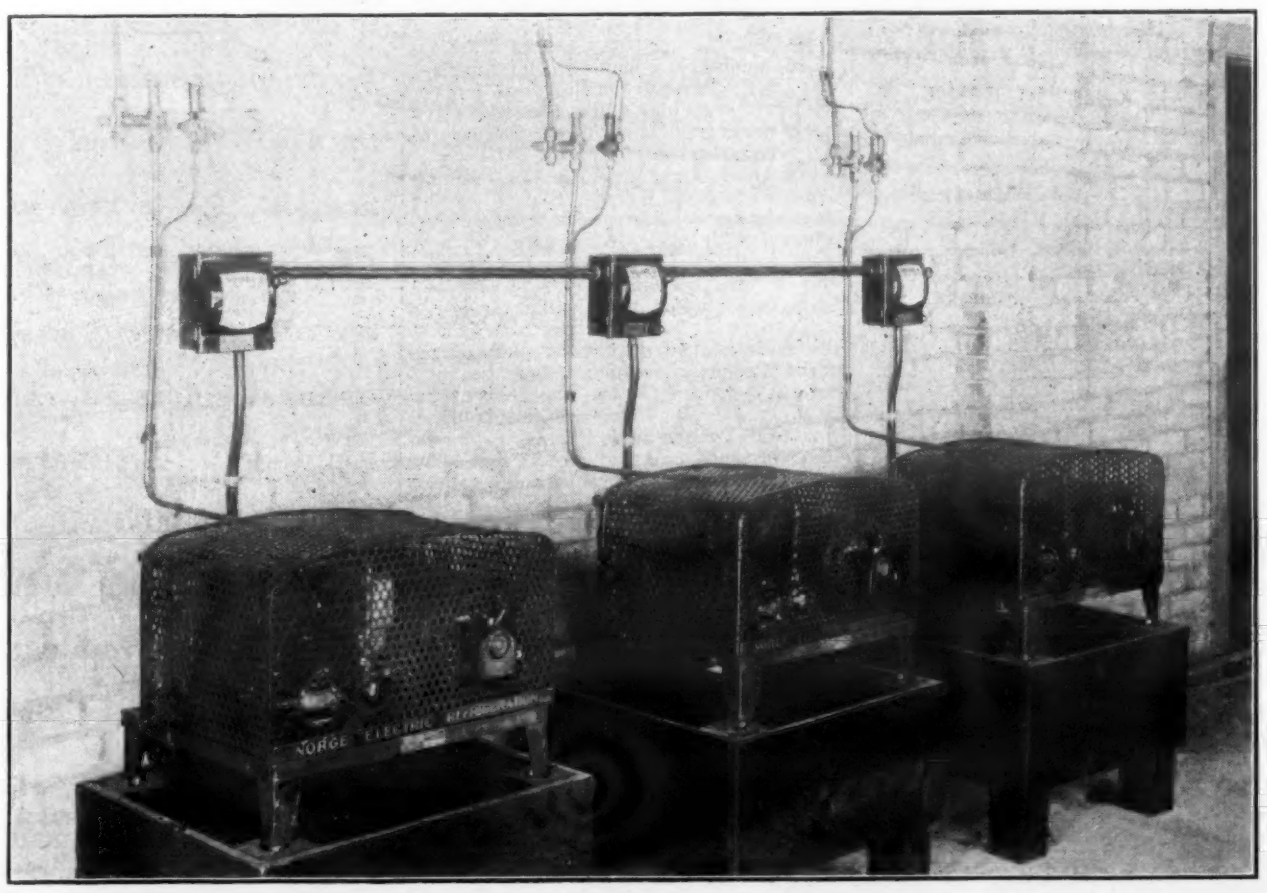
In 8 Years Public Has Bought 7,000,000 Radio Sets, 14,000,000 Automobiles

"The barriers of time and distance have been swept away and life made freer and larger by the installation of six million more telephones, seven million radio sets, and the service of an additional 14 million automobiles.

Use of Electric Power Doubled—Hours of Labor Decreased

"We have doubled the use of electrical power and with it we have taken sweat from the backs of men. The purchasing

Sturdy Bases and Strong Metal Guards Protect Norge Units in Multiple Hook-up



Refrigeration for twenty, five cubic foot cabinets in the Blaine apartments, 2245 Blaine Ave., Detroit, is supplied by the three, model 1000, Norge air-cooled units shown above. The metal guards protect the compressors from injury and tampering and the wood bases insure them against a flooded basement. The Square D switches are easily accessible. Tubing is fastened rigidly to the wall with toggle bolts. A Tagliabue Snap-on control is used.

power of wages has steadily increased. The hours of labor have decreased.

Increased Attendance at Schools—Savings Deposits Doubled

"While our population has grown but 8 per cent we have increased by 11 per cent the number of children in our grade schools, by 66 per cent the number in our high schools, and by 75 per cent the number in our institutions of higher learning.

"With all our spending we have doubled savings deposits in our banks and building and loan associations. We have nearly doubled our life insurance.

Improvement in Home Conditions Reflects Increased National Efficiency

"I especially rejoice in the effect of our increased national efficiency upon the improvement of the American home. That is the sanctuary of our loftiest ideals, the source of the spiritual energy of our people. The bettered home surroundings, the expanded schools and playgrounds, and the enlarged leisure which have come with our economic progress have brought to the average family a fuller life, a wider outlook, a stirred imagination, and a lift in aspirations.

Farmer's Wife Entitled to Same Home Comforts as Other Women

"The object of our policies is to establish for our farmers an income equal to those of other occupations; for the farmer's wife the same comforts in her home as women in other groups; for the farm boys and girls the same opportunities in life as other boys and girls.

American Standard of Living Sets Level of Hope for the World

"There is no selfishness in this defense of our standards of living. Other countries gain nothing if the high standards of America are sunk and if we are prevented from building a civilization which sets the level of hope for the entire world.

Maximum Use of Machines the Way to Lower Costs and Higher Wages

"We have seen a growing realization by the employer that the highest practicable wage is the road to increased consumption and prosperity and we have seen a growing realization by labor that the maximum use of machines, of effort and of skill is the road to lower production costs and in the end to higher real wages

Growth of Associations Points to Higher Ethical Standards

"The whole practice and ethics of business has made great strides of improvement in the last quarter of a century, largely due to the effort of business and the professions themselves. One of the most helpful signs of recent years is the stronger growth of associations of workers, farmers, business men and professional men with a desire to cure their own abuses and a purpose to serve public interest. Many problems can be saved through cooperation between government and these self-governing associations to improve methods and practices. When business cures its own abuses it is true self-government which comprises more than political institutions.

Government Can Aid Business by Scientific Research and Statistical Service

"The Government can be of invaluable aid in the promotion of business. The ideal state of business is freedom from those fluctuations from boom to slump which bring on the one hand periods of unemployment and bankruptcy and on the other, speculation and waste. Both are destructive to progress and fraught with great hardship to every home. . . . By scientific research it can promote invention and improvement in methods. By economic research and statistical service it can promote the elimination of waste and continue to stability in production and distribution. By promotion of foreign trade it can expand the markets for our manufacturers and farmers and thereby contribute greatly to stability and employment.

Integrity and Usefulness, Not Size, is the Test of Business

"Our people know that the production and distribution of goods on a large scale is not wrong. Many of the most important comforts of our people are only possible by mass production and distribution. Both small and big business have their full place. The test of business is not its size—the test is whether there is honest competition, whether there is freedom from domination, whether there is integrity and usefulness of purpose.

Small Business Must be Protected from Predatory Interests

"As Secretary of Commerce I have been greatly impressed by the fact that the foundation of American business is the independent business man. The department by encouragement of his associations and by provision of special services has endeavored to place him in a position of equality in information and skill with larger operations. Alike with our farmers—his is the stronghold of American individuality. It is here that our local communities receive their leadership. It is here that we refresh our leadership for larger enterprise. We must maintain his opportunity and his individual service. He and the public must be protected from any domination or from predatory business.

Happier Homes the Final Purpose of Increased Efficiency

"Our purpose is to build in this nation a human society, not an economic system. We wish to increase the efficiency and productivity of our country, but its final purpose is happier homes."

Home Economist Answers Questions of Housewives on Electric Refrigeration

By Betty Bright

There are six things Cleveland women want to know about electric refrigerators—six questions that are asked most frequently by visitors at the exhibit of everything electrical for the home, maintained by the Electrical League on the 14th floor of the Hotel Statler.

Here are the questions and the answers to them as they were given to me by Gladys Applebee, electrical homemaking expert in charge of the exhibit:

1. How long does it take to freeze a tray of ice cubes?

Ordinarily, five hours. The time required varies somewhat. Temperature of the water when it is placed in the tray, for instance, has a great effect on the length of time required for freezing. If the water is comparatively cold, the time required for freezing is comparatively short.

2. If I need more ice cubes than can be frozen in the tray provided, how can I get them?

Freeze one trayful. Remove the cubes and place them in the coldest part of the cabinet. Here they will keep six or seven hours while you are freezing a second tray.

3. How long can foods be kept in the electric refrigerator?

This varies with different foods. But almost any stock of perishable food can be preserved in the electric refrigerator until consumed by a family of average size.

4. What foods have to be covered when they are placed in the electric refrigerator and why?

Cheese, fresh green vegetables, and all foods which are most palatable when they are moist, should be covered when placed in the electric refrigerator.

This is because the electric refrigerator supplies dry cold, which is one of its greatest advantages. Hence moist foods are covered to keep them from drying out.

5. Should one follow any particular scheme in placing foods in the electric refrigerator?

Yes. Milk, butter and uncooked meats should be placed directly under the cooling unit when the unit is at the side of the box, and at the back of the bottom shelf when the unit is across the top of the cabinet.

These two points are the coldest places in the box because the cold air which has passed over the freezing point reaches them first in its circuit.

Leftovers, vegetables, eggs and fruits may occupy the middle shelves. Foods of strong flavor should be placed at the point where the air is about to pass on to the freezing unit so that odors from them may be carried directly to the freezing unit where they will be congealed in the form of frost.

6. What care do I have to give to the electric refrigerator?

Wash the interior of the cabinet once a month with lukewarm water in which baking soda or borax has been dissolved. Free the cooling unit from accumulated ice once a month. Oil the refrigerator motor as frequently as the manufacturer prescribes.

FORD SHIP EQUIPPED WITH REFRIGERATION SYSTEM OF OWN DESIGN

The M. S. Lake Ormoc, of the Ford Motor Co., en route from Detroit to Brazil, is equipped with modern refrigerating equipment to safeguard the health of the crew and the men who are on their way to the Ford rubber plantations. Three half-ton capacity ice machines constructed at the Ford plant are located amidships along with storage and refrigeration tanks.

All machinery on the Ormoc, except engines, and standard compass, is worked electrically. Two auxiliary Worthington Diesel type engines deliver 180 horse power and furnish all electricity for the ship. The power plant of the ship located midships of the hold, consists of a 1,000 horse power, full Diesel type 6 cylinder Busch-Sulzer engine.

Living and working quarters, power plant, every part and piece of the ship reflects the theory that cleanliness is next to efficiency. Delivered into every room amidships is air cooled by the refrigerating system.

The Ormoc was one of the 198 ships that were purchased from the government. It has been redesigned and repowered by the Ford Co.

PENNSYLVANIA LINE TO SPEND 5 MILLIONS ON REFRIGERATED CARS

The expenditure of $5,000,000 in another move to capture perishable freight traffic from the Erie Railroad has been recently announced by the Pennsylvania Railroad according to the *New York Times*. The Pennsylvania Co. will spend this sum on 500 all-steel refrigerator cars of new design made so that they may be moved as parts of high-speed passenger or express-merchandise trains.

The placing of this large refrigerator car order is said to be a reply to extensive rehabilitation of rolling stock on the Erie line by the Van Sweringen management.

Part of the competition for refrigerating business between the two roads is afforded by their plans for terminal improvements at Jersey City. J. J. Bernet, president has been quoted as saying that his company had invested $1,000,000.00 in yards for perishables at the entrance to the Holland vehicular tunnel and that it would spend $2,000,000.00 more on a distribution center in New York. The Pennsylvania Railroad is reported to be planning a $2,500,000.00 pier at the foot of Morgan Street, Jersey City.

PACIFIC COAST LINE INSTALLS EXTENSIVE COLD STORAGE PLANTS

To take care of the ever increasing demand for Pacific Coast perishable goods in Argentina and Brazil, the Westfal-Larsen line announced recently through its Pacific Coast agents, the General Steamship Corp., that it will immediately construct refrigeration facilities for 1,500 tons of perishable cargoes in each of the vessels in the fleet now being operated on a monthly schedule in this trade.

This decision has been reached as a result of numerous recommendations that have been received from shippers in San Francisco, Seattle, Portland and Vancouver, who see vast possibilities in building up the trade in apples, grapes and various other Pacific Coast fruits and fresh eggs through the regular monthly sailings that will be offered.

A large quantity of these commodities has heretofore moved by rail across the continent to New York and thence to the ports of Rio de Janeiro, Santos, Montegideo and Buenos Aires. Direct facilities that will be afforded will bring down the transportation cost and minimize the hazard incident to the carriage of perishables by the rail and water route that has heretofore been used.

COOLERS ON TRUCKS SOLVE PROBLEM OF INDIANA MINING FIRM

Coal mining is a man's job, and a good supply of cold pure drinking water plays a big part in the day of the men who delve below the crust of terra firma to bring out the "black diamonds."

For a long time the Enos Coal Mining Co. of Southern Indiana, said to be the largest operator of strip coal mines in the country, with some 10,000 acres of coal land about Spurgeon, Indiana under production, was up against quite a problem. Strip coal mining or stripping the upper earth to get at the coal deposits as against the shaft method of mining, implies frequent changes of location of operations.

So it remained for the enterprise of the A. F. Wood Co., Frigidaire distributor in Southern Indiana and Illinois, to insure the "floating" gangs of miners and helpers a steady supply of cool drinking water at all times.

Paul Jones, salesman of the Wood organization made the deal. Eight Frigidaire model K water coolers mounted on small hand trucks answer the need admirably.

FRIGIDAIRE SALES CORP. TO OPERATE FACTORY BRANCHES

Frigidaire Corp., Dayton, Ohio, has formed a new company to provide a separate organization under which the present factory sales branches in the United States and Canada will be operated after Jan. 1, 1929. This new company will be known as the Frigidaire Sales Corp. with its principal office at Dayton in charge of R. D. Funkhouser.

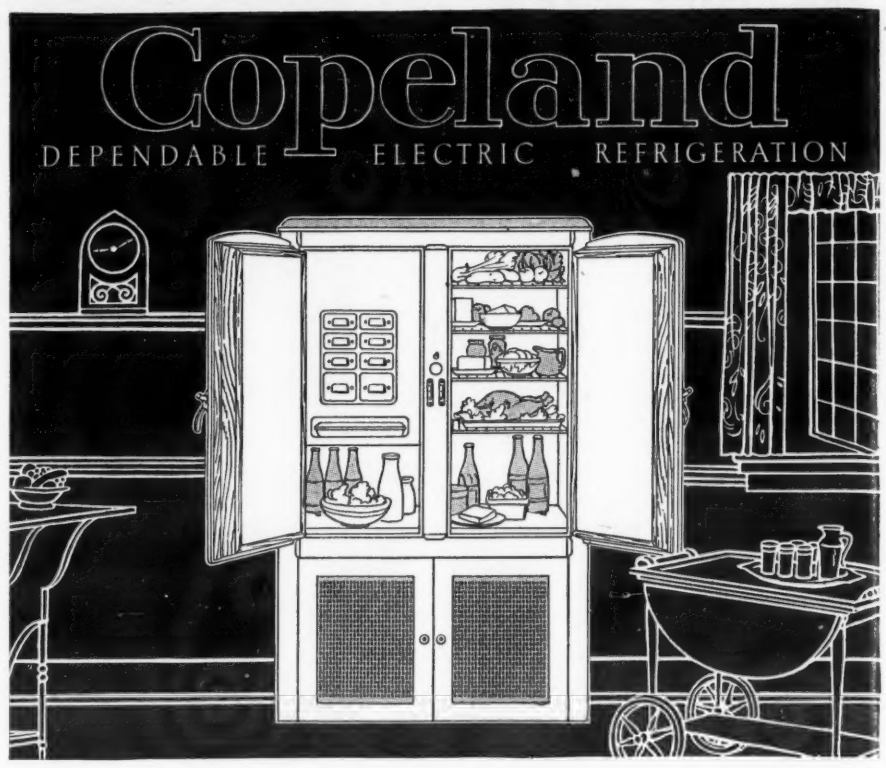
The Frigidaire Sales Corp. is incorporated at Wilmington, Dela., and on July 25 qualified to engage in business in Ohio.

Utility Sold 24 Units in June

The new business department of the St. Joseph Railway, Light, Heat & Power Co., St. Joseph, Mo., sold twenty-four electric refrigerators during the month of June. Appliance sales for that month totaled $20,175.35.

Clips the News for Scrap Book

"Might add that I look forward to each issue of the News and find that I have accumulated quite a scrap book of valuable information clipped from your paper."—A. B. Jeffries, 3348 Clara Avenue, St. Louis, Mo.



There's a Copeland for *every* purpose!

Three lines of domestic electric refrigeration, ranging in price from $195 to $720 at factory—all sizes of separate units for present ice boxes—multiple installations for apartment houses—water coolers for office or factory—units for all classes of commercial refrigeration. *Every* user of refrigeration is a logical prospect for a Copeland! And Copelands are selling—in *every* field! Sales for the *first seven months* have far outstripped any *complete year* in Copeland history! The reason is *value*—value that is based on *quality* workmanship, *low* price, *dependable* operation and a wealth of features such as *excess refrigeration capacities, one or more double-depth dessert drawers in every model, no insanitary drain pipe, cold-tray for crisping salads, efficient insulation, more ice cubes than are provided by any comparable competitive models.* The magnificent new Color-DeLuxe Copelands are without doubt the *finest electric refrigerators the world has ever known:* all-porcelain . . . optional colors . . . electrically lighted . . . cathedral-top doors . . . special design satin-finish hardware . . . divided vegetable bins. Copeland's steady growth is the envy of the industry. Distributors and dealers who want to *grow with Copeland* are invited to write for particulars of Copeland's profit-winning franchise!

COPELAND, 630 LYCASTE AVENUE, DETROIT, MICHIGAN

MAIL THIS COUPON

Copeland, 630 Lycaste Ave., Detroit, Michigan ERN 8-15

I am interested in learning more about the Copeland franchise.

Name_____

Address_____ State_____

GENERAL ELECTRIC · Kelvinator

ELECTROLUX · SERVEL

Copeland · Welsbach

Endorse

The SPARKLET SYPHON
and
The SPARKLET AERATION way
for

Making Delicious Ice Cream without Fuss or Inconvenience

This *new, simple,* and *easy* way of mixing cream for freezing has opened the door to new profits for every dealer and will accelerate refrigeration sales. It does away with all the inconvenience of stirring the cream while freezing.

Simply prepare the mixture for whatever flavor or kind of ice cream you desire according to your favorite Sparklet recipe; pour into the SPARKLET SYPHON and charge with carbonic gas . . . just like making soda water. Discharge into freezing tray, slip it into freezing compartment, and leave *undisturbed* for four or five hours until ready to serve. A cool, creamy delight with a distinctive flavor all its own.

Send for Free Recipe and Instruction Books.

SPARKLETS, *Inc.*
19 West 44th Street,
New York City.

Made without stirring

The secret of good ice cream is in the mixing. As in the manufacture of the most expensive creams, the "SPARKLET AERATION" way of mixing makes use of an inert, pure, healthful gas . . . . carbon dioxide . . . . such as used at every soda fountain. It so thoroughly mixes the cream before freezing that *further stirring is absolutely unnecessary.*

No crystalline formation

The charge of carbon dioxide gas greatly increases the volume of the cream. It is this feature, in addition to the thorough mixing, that gives the frozen cream such a fine, smooth, delicious, creamy non-crystalline texture.

An Ice Cream Soda Fountain for the home

The same SPARKLET SYPHON and BULBS used for making ice cream will supply carbonnated water for mixing sparkling drinks and sodas at home.

1 and as simple as A-B-C

Nothing complicated. Just the SPARKLET SYPHON and a box of a dozen SPARKLET BULBS. Each bulb will serve to make a quart of ice cream or a quart of sparkling charged water.

Changeable Electrical Advertising Panel for Selling Messages

The Sales Dept. of Kelvinator Corp., recommends the use of the versatile electrical sign shown above because of its flexibility for displaying brief educational messages. Several hundred small electric lights with sockets are furnished with each sign so that any word or design may be made as desired. The sockets plug in anywhere on the panel and may be changed at will without the services of an electrician. A transformer is used to reduce the voltage. A rack is furnished to hold the sign in proper position in the window or on the counter and chains for hanging from the ceiling.

The sign is made by the Tellite Mfg. Co., 6 N. Michigan Ave., Chicago, Ill. J. H. Leslie, formerly an electric refrigerator distributor of Fort Worth, Texas, has recently joined the staff of the Tellite Co. and has worked out a plan for distributing the signs through electric refrigerator dealers.

TRY LEMON JUICE CUBES IN YOUR ICE TEA

Fill ice cube trays half full of water, then flavor contents with the juice of two or three lemons (according to taste). If so desired a cherry may also be dropped into each cube.

After the cubes are frozen they will flavor tea very nicely in addition to giving the drink a pleasing appearance.

ANALYSIS SHOWS ELECTRIC REFRIGERATION HIGH IN YIELD TO UTILITY COMPANY

An analysis of the Malden (Mass.) Electric Company's business and property for the year 1926 was prepared by Edward J. Cheney, consulting engineer, New York City, in connection with the pending rate case before the Massachussetts Department of Public Utilities, which showed that municipal street lighting yielded the lowest return (2.609 per cent) on the rate base, and electric cooking and refrigeration returned the highest yield (19.971 per cent).

The total kilowatt-hour consumption for cooking and refrigeration during the year 1926 was 741,127. The average number of customers was 40,801, classified as follows: residential, 36,525; commercial lighting, 3,589; cooking and refrigeration, 292; power, 390; street lighting, 5.

The average revenue per kilowatt-hour sold was 9.35 cents for residential lighting, 8.06 cents for commercial lighting, 5.26 cents for cooking and refrigeration, 3.44 cents for power, 7.14 cents for street lighting and, for all business, 5.038 cents.

"ICE-O-MATIC" AND "ICY-O" DECLARED SIMILAR NAMES

In the Appeal from Examiner of Interferences, The Icy-O Company, Inc., vs. Sievers & Erdman Co., Opposition No. 7400, Commissioner of Patents, the notation "Ice-O-Matic" for refrigerators was held not to be registerable over the trade mark "Icy-O," used on dispensing cabinets of the refrigerator type, by First Assistant Commissioner Kinnan.

It was found that the opposer's mark and the first two syllables of the applicant's mark were substantially the same and when applied to refrigerators would be likely to cause confusion of origin of goods.

R. Peters Named Sales Manager of Enco Products Corp., Buffalo

Roderic Peters has been appointed sales manager of the Enco Products Corp., 698 Main St., Buffalo, N. Y., distributors for Servel and Electrolux refrigerators. Mr. Peters was formerly sales representative in Washington, D. C. for the Servel Sales Inc., Evansville, Ind.

Correction on Description of Nizer Installation in Aug. 1 Issue

In describing an installation of Nizer compressors, a photograph of which appeared on page 16 of the last issue of the NEWS, the statement was made that loops near the ceiling in the one-quarter inch line were there to prevent the transmission of vibration.

This was incorrect. These loops were taken off of the one-half inch return line to prevent oil from coming back into the pressure control thereby causing it to become sluggish and inaccurate.

H. L. Hull Joins Hires Co. in Brooklyn

H. L. Hull, formerly with the Lamson Co., Syracuse, N. Y., is now associated with the Charles E. Hires Co., in the Bush Terminal Building, Brooklyn, N. Y.

ELECTRICAL LEAGUES HOLD CONFERENCE AT ASSOCIATION ISLAND

REPRESENTATIVES of forty-nine local leagues and seven national electrical associations, a total of 249 persons, attended the eighth "Camp Co-operation" at Association Island, Henderson Harbor, New York, August 2-7.

Better electrical wiring for homes was discussed in connection with a plan for establishing a national standard of "Red Seal" specifications for adequate wiring.

W. E. Sprackling, chairman of the Electrical Industry Sales Conference reported on the progress in studying three broad problems of the electrical industry, namely: (1) adequate wiring for homes, (2) the electrical contractor and contractor dealer, and (3) a national advertising campaign. In order to arrive at a plan of action, a fund of $25,000.00 was raised and the J. Walter Thompson Co. employed to make a comprehensive study of the problems.

Addresses were made by the following: Clarence L. Collens, vice-president, Policy Division, National Electric Light Association; W. E. Sprackling, chairman of the Electrical Industry Sales Conference; Stanley A. Dennis, editor, *Electrical Record;* J. E. North, president of the Electrical League of Cleveland; E. D. Tillson, of the Commonwealth Edison Company; D. C. Birdsell, chairman, S. E. D. Industrial and Commercial Lighting Committee; Paul T. Chorington, director of research, J. Walter Thompson Company; Dr. Hugh P. Baker, manager, Trade Association Dept., U. S. Chamber of Commerce; C. E. Greenwood, commercial director, N. E. L. A.; Miss Eloise Davison, home economics advisor, N. E. L. A.; S. J. Ryan, president of Rines Brother Company; S. G. Hibbon, Westinghouse Lamp Company; H. B. Kirkland of the S. E. D.; J. J. Caddigan, of the Edison Electric Illuminating Company, of Boston; Dr. Charles A. Eaton, of the General Electric Company, and W. H. Hodge, vice-president of the Byllesby Engineering & Management Corporation.

The following officers and members of the League Council were elected for the coming year:

Chairman—R. Bourke Corcoran.
Vice-Chairman—D. C. Birdsell.
Secretary—O. C. Small.

MEMBERS

District No. 1—New England—J. J. Caddigan, W. G. Keay.
District No. 2—Eastern—J. H. Van Aernam, D. C. Birdsell, Earl Whitehorne.
District No. 3—East Central—J. E. North, C. M. Beltzhoover.
District No. 4—Middle Atlantic—H. A. Brooks.
District No. 5—Southeastern—A. B. Collins, B. H. Martin.
District No. 6—Great Lakes—R. Bourke Corcoran, C. C. Munroe, J. S. Bartlett.
District No. 7—North Central—J. S. Hogan.
District No. 8—Middle West—E. H. Waddington, C. E. Michel.
District No. 9—Southwestern—J. M. Fried, W. E. Clement.
District No. 10—Rocky Mountain—J. J. Cooper.
District No. 11—Northwest—R. E. Folland.
District No. 12—Pacific Coast—(To be announced later)
District No. 13—Canada—G. W. Austen, J. G. Glassco, James Lightbody.

MILK COOLER ATTRACTS INTEREST AT FARMERS' PICNIC

Much interest was displayed in the milk cooler exhibit of the Philadelphia Suburban-Counties Gas & Electric Co. at a farmers' picnic held in Memorial Park, Schwenksville, Pa., on August 7 and 8. A two can Esco milk cooler was shown equipped with a Welsbach condensing system. Domestic Welsbach units were also shown.

Keeping Coolidge Cool at the Summer White House in Brule

J. J. Kehoe, of the General Electric Co., Cleveland, and A. S. Dunning, of A. S. Dunning, Inc., Duluth distributors, putting the final approval on a G. E. refrigerator now installed in the summer home of the President at Brule, Wis.

A New Convenience in
Mueller
forged VALVES
For Mechanical Refrigeration

Mueller has added to its standard line of *forged* electric refrigerator fittings a flared tube side outlet shut-off valve. This valve is suitable for liquid, receiver or charging valve.

The valve is of the usual sturdy construction that characterizes all Mueller standard fittings for electric refrigeration. The body and cap are forged brass. The stem is made of Tuf-Stuf, a corrosion resisting alloy of great strength.

The superiority of Mueller *forged* Valves and Fittings is well known. They are always in stock for prompt shipment.

⅜"—A-11030 ¼"—A-11031
Flared tube side outlet furnished in ¼, ⅜ and ⅜ inch.

Mueller Refrigerator Valves or Fittings can be made to suit your special requirements.
Send us samples or blue prints for quotation.

Mueller Brass Co.
PORT HURON, MICH.
THREE GENERATIONS OF BRASS MAKING

Color!
If you're using color, be sure you're getting durability. PEMCO Porcelain Enamels are as durable in chromatic colors as they are in black, gray and white. Porcelain Enamel & Manufacturing Company, Baltimore, Md.
PEMCO
TRADE MARK REG. U.S. PAT. OFF.

Wirfs Gasket
assures
Electrical Refrigeration Efficiency

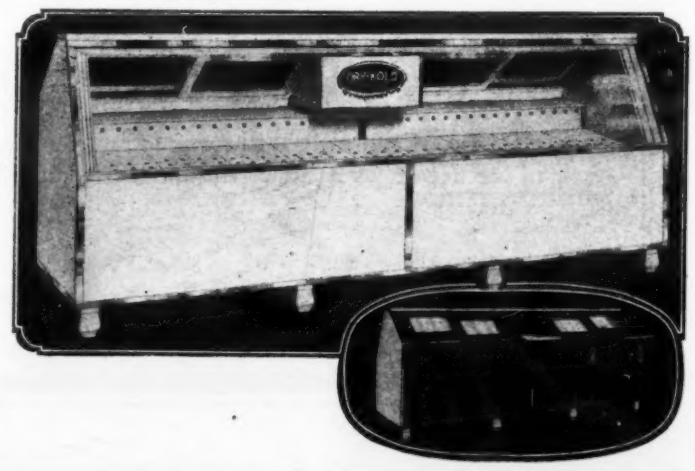
An electrical unit can only be as efficient as the box in which it is installed. Poor door contacts on wood or metal boxes mean that any unit will have to operate a greater number of hours to maintain an efficient refrigeration temperature. This means added operating cost.

Wirfs PATENTED "AIRTITE" *Gasket*

Keeps the cold air in and the warm air out and maintains the proper zone of refrigeration with fewer operating hours. Wide awake dealers have found that it usually clinches the sale. Most manufacturers supply boxes equipped with Wirfs; write us for their names and a sample.

E. J. WIRFS ORGANIZATION, Inc., 135 S. 17th St., St. Louis, Mo.

The Latest Achievement in "Dry-Kold" Refrigerators
"PERFECTION"
DISPLAY REFRIGERATOR
FOR ICE OR ELECTRIC REFRIGERATION
PORCELAIN INTERIOR AND EXTERIOR!
ACTIVE AIR CIRCULATION WITH COMPLETE EQUALIZING OF TEMPERATURE, FRONT AND REAR.
AN EXCLUSIVE DESIGN DEVELOPING THE UTMOST IN CORRECT REFRIGERATION.
EXTRA SHELF SPACE!
PERFORMANCE NOT EQUALED BY ANY OTHER! ESTABLISHES A STANDARD!
THE PRODUCT OF AN OLD ESTABLISHED MANUFACTURER OF THE HIGHEST GRADE, CORRECT REFRIGERATORS.
SEND FOR COMPLETE CATALOG.
The "Dry-Kold" Refrigerator Co.
NILES, MICHIGAN



An Open Letter to the man with $10,000

GEORGE R. MEYERCORD
PRESIDENT

JAMES R. FITZPATRICK
VICE-PRESIDENT
SECRETARY

A. O. JOHNSON
TREASURER

HOWARD B. DUNTON
ASST. SEC'Y AND TREAS

HASKELITE
MANUFACTURING CORPORATION

PLYWOOD - HASKELITE - PLYMETL

WATERPROOF GLUING
120 SOUTH LA SALLE STREET
CHICAGO

PLYMETL
"Air-Tite"
Clothes Vault

CABLE ADDRESS
"HASKELITE"
BENTLEY CODE

FACTORY
GRAND RAPIDS

August 15, 1928.

Gentlemen:

THERE ARE THIRTY MEN WHO OUGHT TO KNOW MORE ABOUT OUR PLANS FOR REFRIGERATOR ASSEMBLY STATIONS.

Such a man has $10,000 and some available time. He wants to operate a business in his own city - a business which will both benefit his community and give him a good return on his investment.

First, let such a man understand that this company is not seeking his money. We have no stock for sale. We are amply able to build and operate these assembly plants ourselves. But we know from years of experience with affiliated lines that best results come from individually owned and operated branches.

Second, let him realize that the PLYMETL cabinet is a distinct departure in refrigerators. It has features superior to any box on the market which give it immediate consumer acceptance. And above all, its unique construction - enabling us to fabricate the shell and ship it flat for local assembly - results in savings of from $6.00 to $26.00 in crating and shipping costs on each box.

A small amount of floor space and a working capital of $5,000 to $10,000 is ample to carry on this business. Any city in which three or more electric refrigerators are being sold per day is a profitable field.

We are closing franchises in individual cities as fast as we get in touch with the right man for the place. Write today for details of our proposition.

Very truly yours,

Geo. R. Meyercord

President
HASKELITE MANUFACTURING CORPORATION

GRM: AL

E.R.N. 8—15—GRAV

TWO REFRIGERATOR SHELF CLAIMS ARE DECLARED INVALID

New Use Discovered for Old Device in Another Art, Held To Be Unpatentable

The Circuit Court of Appeals for the Sixth District on June 30 held in the appeal of the Grand Rapids Refrigerator Co. against Stevens et al. that claims 7 and 8 of patent No. 970672, for shelf supports for refrigerators, were invalid and claims 1, 2 and 4 of patent 1147288 for porcelain coated lining and attaching means therefor specifically disclosed and claimed, were held not to be infringed by a similiar lining used by the defendant with a substantially different attaching means.

The case appealed from the District Court for Eastern District of Michigan, was tried before Denison and Moorman, circuit judges, and Hickenlooper, district judge. The decision of the court, delivered by Judge Hickenlooper, follows in part:

Prior to the use of the shelf supports of the patent, all manufacturers of porcelain lined refrigerators used the ordinary screw-hook, the screw portion of which was inserted through openings left therefor in the lining and screwed into the wooden casing beyond until the washer provided at the head of the screw contracted with or engaged the surface of the lining. Frequent difficulties were encountered in this practice due to the rigidity of attachment between lining and case and the contraction and expansion to which the lining was subjected by temperature changes. The linings also had a tendency to warp somewhat in the process of baking the porcelain coating and where the lining bulged inwardly at the opening left for the shelf support, a greatly increased pressure was often necessary to affix it. Thus in inserting the shelf supports, as well as afterwards, there was a marked tendency to chipping of the porcelain. This is said to be avoided in the patented device by attaching the shelf supports to the lining before the lining is placed in the case, by rotating the bolt or threaded portion of the support while that carrying the washer and in contact with the porcelain is held immovable during attachment, and by thus eliminating all stress and strain due both to attaching the shelf support and to temperature changes.

Other advantages are claimed for the new use, such as the fact that the supports are easily cleaned, that the head of the bolt member operates as a spacing means between the lining and the case and that the washer entirely covers the opening, preventing circulation of air or the entrance of germs; but these are mere incidental results either existing in the shelf support of the prior art or of insufficient moment to evidence existence of invention even if functioning as alleged, which, in the case of the bolt head spacing the lining from the case is at least of doubtful existence, utility or necessity.

We are convinced that in the adoption of the specific shelf support of the claims in issue the patentee exercised no more than a high degree of mechanical ability and power of selection. It may well be that the enumerated advantages of the use of this device in connection with enameled or porcelain coated metal had not theretofore been recognized, but the device itself is old and as described in the patent operates in a manner identical with the devices of the prior art. The use of the shelf support of the patent is only a new or enlarged use of an old device. Such discovery of new uses for or newly observed functions of a device well known in the mechanical or structural arts is not patentable invention.

Claims 1, 2 and 4 of patent No. 1147288 are in issue. This patent also relates to enameled or porcelain-coated refrigerator linings. Such linings consist of a single sheet of metal bent to form back and sides on which a porcelain or enamel coating has been baked prior to use. To this, top and bottom of the same material are attached and the entire assembled lining is firmly affixed to the front wooden frame of the refrigerator and, thus attached, is inserted into the wooden case, leaving a small air space between the lining and the side walls and top of the case for insulation purposes.

The District Court held that in so devising the shape and means of attachment of the lining to the frame and in placing the finishing strip (claim 4) which provided the seat for closing the door, the inventor had displayed no more than mechanical skill in the use of well-recognized methods of construction. This issue we find it unnecessary to here decide.

The first three claims were rejected on reference to prior patents, were amended and again rejected, and were then cancelled, the patentee saying: "The rejected claims have been cancelled and a new claim is submitted which is drawn along the lines of the allowed claims but restricted to more specific details of construction. Its allowance is requested."

By so cancelling original claims 1, 2 and 3, the patentee has surrendered all claim to a monopoly in a lining alone of the specific form used by both plaintiff and defendant and has limited himself to a narrow range of equivalents of the attaching means specifically disclosed and claimed.

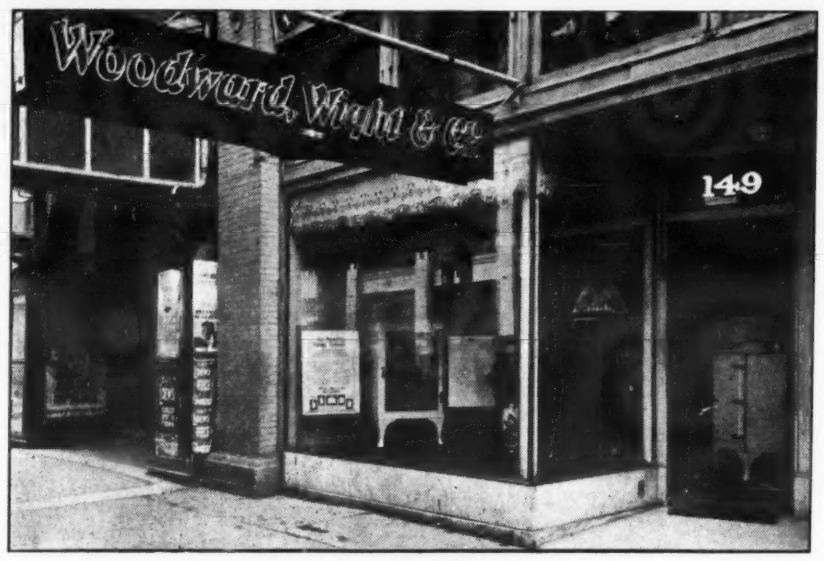
We are of the opinion that the means used by the defendants for attaching the lining to the frame was a substantial departure from the means specified and claimed in the patent in suit and it is therefore unnecessary to determine the question of invention. The petition was properly dismissed on the ground of non-infringement.

Copeland Distributor Exhibits Models at Minneapolis Power Show

The W. S. Nott Co., Minneapolis Copeland distributors, had a pleasing display at the Minneapolis Auditorium in connection with the Power Show held there August 1, 2 and 3. Approximately $1,000,000 worth of power equipment and machinery was on display at this time in connection with the annual meeting of the Minnesota Power Association.

Location in Theatre District Proves to Be an Advantage to New Orleans Firm

By R. A. Sullivan



The location of the electric refrigeration display room is one of the most important considerations in connection with the retail end of the business, in the opinion of R. D. Gallagher, manager for the electric refrigeration department of Woodward, Wight & Co., Ltd., New Orleans. The display rooms of this company are unusually well located, he believes, since they are not only in one of the leading shopping districts of the city, but also because they are in the heart of the theatrical section.

It was feared for some time that the theatrical district would not prove advantageous, but it was hoped that the fact that the display rooms were in the shopping section of the city would prove helpful. As matters developed the firm was right on both counts.

It developed that pleasure-seekers were forced to pass the company's well-lighted display windows, often at night and the picture of the well-arranged displays registered in the minds of many a housewife who may have done most of her warm weather shopping by telephone, and thus not have had the opportunity to pass the display rooms during the day.

The result of the nightly exhibit of refrigerators to pleasure-seekers is that numerous unsolicited calls were made on subsequent days.

The company does not depend entirely on location, however, for its advertising, although location is considered very important, and the additional rental the present site commands is charged against advertising. The location of the show rooms is marked by a neon sign that extends across the sidewalk, and may be seen for several blocks in either direction.

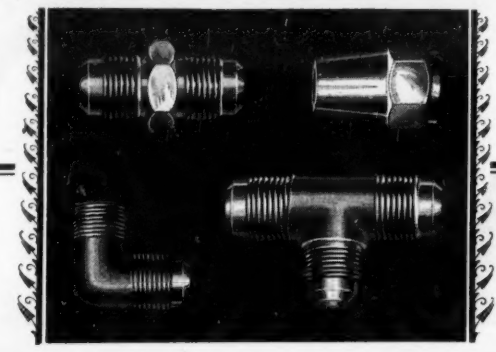
The display rooms adjoin an arcade which is the entrance of two theaters. A few feet to the right, toward Canal street, is the entrance of the Roosevelt Hotel. The Orpheum Theater is in the near vicinity, and half a dozen motion picture houses are in the immediate neighborhood. The rooms are at 149 Baronne street, which street is rapidly becoming an important shopping street.

Mr. Gallagher reports that a direct-by-mail and an intelligent follow-up campaign have proven very satisfactory in developing new business. Every name in the Social Register of New Orleans has been included in a direct-by-mail campaign just ended. The Social Register was selected because names listed there are considered logical prospects, and in a position to buy.

"CONSTANT REFRIGERATION" IS TITLE OF MOVIE BEING SHOWN BY DALLAS MILK CO.

When the Dallas (Texas) Milk Co. decided to film the story of its product throughout its journey from the dairy to the consumer, an electric refrigerator was one of the main "characters." Titled "Constant Refrigeration," the film shows the care exercised to keep the milk at the proper temperature at the dairy, in the trucks, in grocery stores and other retail houses, and finally how the housewife should receive it.

A Copeland refrigerator is used in the movie. The film is being shown at the free picture shows in municipal parks where it will be seen by approximately 2,000,000 persons during the summer, officials of the Milk company estimate.



PIPE *and* TUBE
FITTINGS

Made From Brass Forgings

For many years we have specialized in the manufacture of brass fittings, in small sizes, for connecting brass and copper tubing.

We are now producing similar parts made from BRASS FORGINGS—including a full line of forged nuts. These fittings are especially designed to meet the requirements of Iceless Refrigerator Manufacturers for fittings of a superior type. These fittings will not leak gas, air or liquids under mechanical pressure. They have the compact grain structure, high tensile strength and smooth, flawless surfaces found only in forgings. Our forged fittings are accurately machined, carefully inspected and individually wrapped and labeled.

Send a sample or blue-print for quotations on parts of a special nature. Catalogue No. R-30, showing our complete line of standard fittings, will be mailed on request.

COMMONWEALTH BRASS CORPORATION
DETROIT 5781-5835 COMMONWEALTH AVE. MICH.

Over 250,000
SATISFIED Users

"To the dealer in electrical refrigeration of any type, the prestige of McCray as a builder of fine cabinets has real profit value."

PIONEER in modern sanitary refrigerator construction, for 38 years McCray has held to an unyielding ideal of quality which is reflected in the remarkable service records of McCray installations.

McCray users have always been our best advertisements. This army of over 250,000 satisfied customers is striking evidence of that leadership which is further revealed in the fact that McCray is the world's largest manufacturer of refrigerators for all purposes.

In single stock units and complete built-to-order installations for the largest institution, McCray quality is held to this single high standard.

All McCray models may be used with electric or mechanical refrigeration of any type, or ice. Pure corkboard, sealed with hydrolene by a distinctive process, provides perfectly air-tight insulation.

Send for latest catalogs and further information about refrigerators to meet your specific need. No obligation, of course.

McCRAY REFRIGERATOR SALES CORPORATION
Dept. 66. Kendallville, Indiana
SALESROOMS IN ALL PRINCIPAL CITIES *(See Telephone Directory)*

McCRAY REFRIGERATORS

Even the 'Bo in the Macon Jail Endorses the Good Work of Mr. Watson, Frigidaire Dealer

By Archie Richardson

TWO men come to Macon, Georgia, on the Dixie Limited. One rides in a Pullman coach and goes to the best hotel. The other rides the bumpers and is met by a blue-coated reception committee and escorted to the county jail. The former must be satisfied with ice water brought in a pitcher by a bell hop; but the 'bo luxuriates in the city's only circulating ice water system, which places electrically refrigerated water on tap in every cell in the jail. All of which suggests that E. T. Watson, Frigidaire dealer in Macon, knows how to get business in strange quarters.

A good portion of the time of his organization is being taken up in selling and installing electrically refrigerated water coolers. Stores, cotton mills, and other places where large numbers of people are employed are all regarded as good prospects. Mr. Watson appeals to the owners on the grounds of economy, increasing the efficiency of workers, making them more contented, and conserving the health of the organization.

The city's two largest department stores and the plant of the largest local newspaper were equipped with Frigidaire drinking fountains during mid-summer.

The health appeal has from the outstart been Mr. Watson's strongest argument. Its use was the best aid in introducing Frigidaire electric refrigeration to the people of Macon, and it still plays a prominent part in practically every sale made.

When Mr. Watson started out to sell the Macon people their first electric refrigerators, he decided that the strongest appeal would be the matter of health preservation and he gathered authoritative data showing how much safer is the health of the family that has an electric refrigerator than is the health of the family that must depend on a refrigerator that can at best only retard the spoilage of food for a day or two.

Many people who could not have been sold on the greater service of the electric unit or through a comparison of costs of ice and electric refrigeration, bought quickly when they were convinced that they were being offered not merely an improved system of refrigeration but something that would eliminate much of the sickness the members of the family were subject to and that might even prevent fatal illness.

Many a sale has been made by showing that numerous minor ills and some of the serious ones of the average family disappear with the installation of refrigeration that keeps food so cold that bacterial growth is negligible.

When the city's first half million dollar apartment house was built three year's ago, Mr. Watson had so thoroughly sold the public on the idea that electric refrigeration was an essential of the best in home equipment that the management, anxious to obtain the best class of tenants, had an electric unit placed in each apartment.

An advantage that comes from selling installations to apartment houses that is often overlooked or given less attention than it should have, in the opinion of Mr. Watson, lies in the fact that those people who live in apartment houses equipped with electric refrigerators will never be satisfied without them when they move to homes of their own. Thus, in equipping an apartment house with his refrigerators, the dealer is building business for the future.

A large majority of the apartment house residents of the small cities expect to have homes of their own sometime. Many of them are newlyweds and take an apartment while saving up enough money to make the first payment on a home. Others are not certain they will be in the city permanently or who wish to look around before buying a home.

In any case, when a family goes from an apartment house provided with electric refrigerators to a home of their own, there is almost a certainty that an electric refrigerator will soon be bought and the name goes down with the livest of live prospects in Mr. Watson's records.

A TASTY COCKTAIL EASILY PREPARED

The quickest way to make a satisfactory fruit cocktail is to add a few fresh fruits—an apple, a banana and an orange for instance—to a can of mixed fruits. If you wish to prepare a cocktail entirely of fresh fruits, be sure to include either grape fruit or orange in order to furnish the necessary tang and to keep the other fruits from discoloring.

Prepare your cocktail in the morning and leave it in the electric refrigerator to chill thoroughly and to permit the flavors of the fruits to blend. Honey used in place of sugar for sweetening makes a particularly delightful cocktail.

KELVINATOR TESTIMONIALS CONVINCINGLY PRESENTED IN NEBRASKA POWER BOOKLET

Eleven testimonial letters from Omaha housewives are attractively presented in a small booklet entitled "For Housewives Who Desire to be Happy" which has been prepared by the Nebraska Power Co., Omaha, Nebr. These letters are arranged in a logical order each one bringing out a selling point in favor of Kelvinator electric refrigeration. Accompanying each testimonial is a photograph of the user standing near her Kelvinator.

The booklet is approximately 3 by 5 inches and a full page is devoted to each photograph with the opposite page carrying the endorsement letter. A note on the back cover invites persons living in towns served by the Nebraska Power Co., to inspect a Kelvinator in any one of the electric shops.

DOUGLAS FIR PLYWOOD MAKERS FORM INSTITUTE

Announcement is made of the formation of the Douglas Fir Plywood Institute at Tacoma, Wash., an organization representing the expression of a desire on the part of the leading manufacturers of Douglas Fir plywood to better the conditions and methods of the plywood industry and to further the use and extend the scope of Douglas Fir plywood in all branches of construction and industry.

An official inspection service has already been started by the members of the institute in order to maintain a strict uniformity of grades. A program of advertising will be outlined, designed to educate the various marketing factors to the uses of Douglas Fir plywood. The institute will also establish a research laboratory.

Shreveport Frigidaire Dealer Is Host to Sales Force of 100

The annual banquet of McCollister Brothers, Frigidaire dealers in Shreveport, La., was held on July 30, at the Washington Hotel. More than 100 salesmen and their wives attended.

BUREAU OF HOME ECONOMICS ISSUES LIST OF REFERENCES ON HOUSEHOLD REFRIGERATION

"Household Refrigeration, a Partial List of References" is the title of a bulletin released by the U. S. Department of Agriculture, Bureau of Home Economics, at Washington, D. C. The foreword states that the list of references is only partial, the earliest reference included being dated 1913. Only publications in English are covered.

References are arranged under subject headings, with brief annotations. An authors index and a list of periodicals containing articles on electric refrigeration regularly or occasionally are included.

ICE CREAM BOOTLEGGERS DISCOVERED IN DETROIT

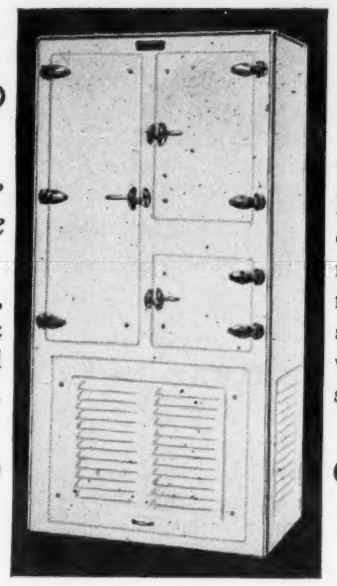
The discovery of the "ice cream bootlegger" has arisen from the arrests made recently in Detroit in connection with an investigation of approximately 300 ice cream dealers who it is reported have been selling the product of the Gordon Certified Ice Cream Co. under the label of the Detroit Creamery Co.

T. H. Broughton, director of the Bureau of Dairying, State department of agriculture at Lansing, Mich., has asked for a grand jury investigation of the matter.

Eastern Oklahoma General Electric Dealers Hold First Convention

More than forty men attended the first eastern Oklahoma convention of retail dealers for General Electric refrigerators held June 29 in Tulsa. Dealers and salesmen from Bartlesville, Muskogee, Bristow, Sapulpa, McAlester, Miami, Vinita and other eastern Oklahoma cities attended.

BOHN'S *Latest Achievement* — The New BOHN "Super Quality" Refrigerator



Beautiful, Distinctive

Can be had in 5, 6, 7, 9 and 12 cubic foot net food storage capacity.

White Porcelain Enamel inside and outside. The machine compartment is ideal for storage space where remote installation is made.

[Featuring the Insulated Baffle Wall]

The lowest prices in our 31 years of manufacturing *"Super Quality"* Refrigerators

BOHN REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

These models are on display at our own stores in

NEW YORK 5 East 46th Street
CHICAGO 227 No. Michigan Blvd.
BOSTON 707-709 Boylston Street

Tellite—the only device that gets across the timely message *instantly* and effectively at *reasonable* cost. Each letter is formed of individual lamps of unusually long life. A child can arrange them in the panel for the story to be told. In various sizes for either alternating or direct current, single or double rows of letters. Sturdily constructed of bronze and bakelite, Tellite will last for years—no material to rust or burn. Installation and operation are simple and are fully explained in instructions accompanying each sign.

a 2 in 1

Electric Sales Maker

For Electric Refrigeration Dealers

1. The new Tellite Changeable Electric Sign in your window will sell refrigerators for you. You can change it as often as you please to give any desired message. Here at last is an electric sign at little more than show card cost. Now you can tell each day's new selling idea in light. A Tellite with a *timely* message is sure to draw attention to your refrigerator display window.

2. You can act as agent and make sales to other merchants in your territory. Tellite sells on sight. Dealers everywhere are quick to recognize its advertising and selling power. They get thousands of electrically lighted messages for the price of one. Tellite is the first electric sign that you can stock as a piece of merchandise. A few territories are still available. Send the coupon for details.

A large electric refrigerator manufacturer says that "Tellite is the most attractive and powerful sales item I have ever seen."

This coupon will bring you full details about Tellite and open territories—*mail it today.*

Tellite Manufacturing Company
6 North Michigan Avenue Chicago, Illinois

Send us full details of the Tellite proposition and open territory.

Name.....

Address.....

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Electric Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

BUSINESS NEWS PUBLISHING CO.

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F. M. COCKRELL, *Editor and Publisher*

H. A. DELASHMUTT, *Advertising Manager* BEULAH WERTZ, *Circulation Manager*
HUGH J. MOORE, *Assistant Editor* GEORGE N. CONGDON, *Business Manager*

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AUGUST 15, 1928

Business is Good

THE present year, 1928, has proved to be a *good* year for electric refrigeration—the best, in fact, that the industry has experienced so far. Present conditions are in marked contrast with those of the previous year during which many of the manufacturing and distributing organizations were endeavoring to readjust themselves from the over-expansion of 1926.

Business has been good and continues good, according to all reports. Many manufacturers are still behind with deliveries. Stocks accumulated during the winter and early spring have disappeared. Apartment installations and commercial applications have proved to be the cream of the business. The water cooler market has been particularly good. The hot weather which has prevailed generally during the past month has undoubtedly been a factor sustaining mid-summer sales.

Distributors and dealers, in the large majority of cases, appear to be satisfied with profits. Manufacturers are taking a serious interest in the welfare of the dealer, having realized that his prosperity is essential to the success of all concerned. Dealers are being selected and trained more carefully. With the experience gained in selling and with a fuller knowledge of mechanical problems the established agencies are optimistic of the future.

All indications point to a big year in 1929. All along the line, plans are being made for a reasonable expansion in production facilities and sales activities. There are no signs of running wild, no talk of revolutionary designs or methods which will "knock 'em dead." Gradual and continued improvement in design, production and distribution is expected. There is evidence that the industry is settling down to a steady, forward pace.

The benefits from educational work—returns from the millions of dollars spent in advertising during past years—are beginning to be felt. Sales resistance is greatly lessened and in some sections of the market it seems to have completely disappeared. There is an actual demand engendered by forces beyond those of the industry itself. Competition for public favor among apartment house owners, retail food stores and other groups is acting to expand the market and make it easier to get the business.

Competitive conditions are showing signs of improvement in some directions. There is less complaint of ruinous price cutting. Knocks in advertisements are still in evidence. The fine line between aggressive and destructive competition is none too well recognized.

Many jobs are awaiting the attention of an active and representative association. The officers of the Refrigeration Manufacturers Council have a responsibility to the industry and should lose no time in making organization machinery available for the working out of industry problems.

Faith in the Future

WITH the next issue, ELECTRIC REFRIGERATION NEWS passes the second milestone in its service to the industry. During this period fifty issues of the paper will have appeared. The NEWS is proud of its record of continuity of service and adherence to the policies announced when the paper was established September 11, 1926.

Throughout the past two years the NEWS has endeavored to give the highest possible value to subscribers and advertisers. Sound editorial and business policies have been maintained with an eye to the future. The editorial department has consistently refused to publish anything which lacked news value and reader interest and has gained respect by so doing. The advertising department has maintained rates to all alike and avoided the slightest exaggeration of circulation. All records are open to inspection at any time.

The NEWS is proud to be associated with an industry of such an aggressive character—one which has met so many problems and overcome so many obstacles. The NEWS has unlimited faith in the future of electric refrigeration and forsees the development of a great basic industry.

ECONOMIES OFTEN LOST BY FAILURE TO CONSULT EXPERIENCED ENGINEERS

Adequate Insulation and Air Circulation Important Factor in Efficiency

To the Editor of
ELECTRIC REFRIGERATION NEWS:

In the July 18, 1928, number of ELECTRIC REFRIGERATION NEWS, engineers are being informed that business men, engaged in long distance transportation of perishable commodities by rail and water, are seeking more economical and more satisfactory methods of refrigeration than those in use today. Engineers and inventors are, therefore, invited to devise means to improve this situation.

A layman may see little difficulty in satisfying this request, but one who has spent many years of study and application in this broad field knows that important improvements in refrigerating engineering come but slowly and by process of evolution.

Cost of Power a Factor

The situation is similar to that in the field of power generation. The cost of power, now mostly transmitted in the form of electrical energy, has been successively lowered during the past years until it is now but 0.5 cents per kilowatt hour in some cases, but a cost of 10 or more per cent lower still is scarcely obtainable, and will take years of further effort to secure. Since, in refrigeration, the item of power or equivalent heat is 50 to 75 per cent of the total cost, it will not be possible to surpass the economies obtained in the field of power and heat generation.

The application of power and heat involves vastly more capital than all refrigerating and ice making, and the amount of study and research done in these fields is in a like ratio.

Best Methods Not Widely Used

However, the present writer is aware that many improvements developed in the art of refrigeration still await adoption by business men who are, by their stockholders, expected to operate their plants in accordance with first class practice. That the cost of refrigeration (with purchased electric power) can be made remarkably low is proved by a report giving the refrigeration required in a 5,800,000 cu. ft. cold storage plant operating in New York City (*Refrigerating Engineering*, Dec., 1926). Thus, during July, cooler space was kept at 31 degrees Fahrenheit with 26 tons refrigeration per million cu. ft., while the freezer space was kept at —4 degrees Fahrenheit with 54 tons refrigeration per million cu. ft.

For 2,000,000 cu. ft. cooler and 1,000,000 cu. ft. freezer space would, therefore, be required a total of 106 tons refrigeration, while in a New York Municipal cold storage plant of this capacity, which is not yet in operation but represents recent practice, over 800 tons refrigerating capacity was installed. This illustrates some difference in design or, shall we say, difference in the skill of engineers in charge?

During the past five years remarkable economies and large dividends have been realized upon the employment of refrigerating experts who instituted improvements in most of the large ice plants in the United States.

Improvements Being Adopted Reluctantly

It would take too much space to enumerate here the great number of improvements that are available today in the refrigerating field and which can be had for the asking, provided the purchaser is willing to expend at the outset $1,000 to get back $2,000. The larger a purchasing corporation the more difficult it is usually to secure the consideration of something better than what was specified by one who is perhaps well situated and who would find it superfluous to keep in close touch with the various developments coming through in this special field. Where this is not the case, up-to-date equipment might still be secured by encouraging bidders to make alternate proposals for apparatus capable of yielding the best possible results and letting them explain the difference in price. It is rarely possible to combine highest quality with lowest price.

Engineers Ready to Co-Operate

The most important factor in any enterprise is management. Especially with engineers a great deal can be accomplished if they are sure that loyalty and special effort will be duly rewarded. To hold the good will of the men, active co-operation must be practiced. Men working to reduce costs like to obtain some portion of the savings effected, and it is a narrow-minded corporation that neglects to avail itself fully of this latent asset.

A large corporation should have means for showing its employees the cost per ton of output obtained at its various stations, so that one has a definite measure of performance under otherwise similar conditions. Some definite object must be set up, and a challenge issued to reach the object. Engineers work with abstract quantities. If the company actually desires to reduce the cost of any particular process or item below a stipulated current average figure, someone will find the solution before long, and if the cost of the desired mechanical perfection is commercially feasible, it should be adopted.

No Future for Liquid Air

New methods like liquid air, dry ice, vacuum systems must not be taken too seriously. A technical engineer can analyze a promoter's claims and gauge quite closely the value of a process and can prove to his employer, by calculation or trial, that instead of the new plans "causing a revolution in the engineering world" the scheme very likely is twice as expensive as the commonly used method. Thus, liquir air, for example, will positively never be used for commercial refrigeration, and dry ice will find but limited application so long as its price is not materially reduced.

Fundamental Process Remains

Refrigeration means the removal or transfer of heat. Some refrigerating medium at, say 20 degrees Fahrenheit, cools the air in a refrigerator to, say 32 degrees. This air cools the victuals to 35 degrees. The refrigerating fluid in turn transfers the heat to cooling water at about 60 degrees which flows to the sewer at 70 degrees. Thus the heat had to be lifted from 20 to 70, a range of 50 degrees, which process may be likened to the pumping of water from a well 50 ft. deep. The deeper the well, and the lower the temperature, the more energy is required to do the work. Any process which employs a temperature 20 or more degrees below the desired refrigerator temperature is necessarily extravagant in proportion to the total temperature range covered. It would take less power to refrigerate with 24 degrees or 28 degrees vapor, but then the air cooling surface would have to be increased which would add to the first cost, and the relative humidity obtained would be too high.

Refrigeration Not Employed Sufficiently Now

One of the most profitable ways of keeping down the refrigeration required is the use of adequate insulation, kept permanently dry. A very common error is the lack of air circulation, no one taking the trouble of calculating the available air velocity and the volume to be circulated per hour per ton of ice melting effect. Food to be transported should be completely pre-cooled and kept constantly cold until arrival in the kitchen. A temperature of 40 to 35 is better if preservation for a longer time is desired.

If foods were kept constantly under proper refrigeration, the consumption would be increased, likewise the yield to both farmer and shipper. Fruit, like cantaloupe, arrives in New York half ripe, hard as a brick, to have it survive exposure to the warm, moist atmosphere for about two weeks. By that time the fruit it still tasteless and unripe and starts to rot so that 75 per cent of it must be thrown away and its cost burdened upon the remainder. The same thing happens with bananas, peaches and other fruits.

As long ago as 1888 the writer observed in Switzerland a Board of Health officer inspecting apples and other fruit as to the state of ripeness; unripe fruit was not permitted to be sold to the public. With inexpensive refrigeration available now on all sides, why do we Americans have to accept unhealthy, unripe fruit in these days? Eggs are quite expensive and a valuable food. Everybody likes them fresh, but there is no advice to food purveyors, urging that eggs be kept below 35 degrees Fahrenheit from chickens to table.

Fish can be preserved perfectly for a year by immediate freezing. They should remain stone-hard until arriving at the frying pan. Then they should be thawed out in cold water. But the public is not informed of these facts, and fish merchants prefer to retail their fish in soft state, not being aware that this state means decay and danger of poisoning.

Broadcast Present Available Information First

In other words, in addition to the application of correct and economical refrigeration, which is fully available today, it requires further education and possibly some legislation to compel people to stop the waste of food and money in this field. If we measure this task with the time required to acquaint the public, for instance, with the small value of the Eighteenth Amendment as written, we can see that it will likewise take years before full refrigeration will be adopted as widely as it should be, and with more extensive application will come ways and means to further lower the cost. Meanwhile, it is suggested that transportation companies and shippers take advantage of the vast amount of useful information that has accumulated since 1890, as recorded in the journals and transactions of societies representing the ice, cold storage, and refrigerating industry.

American resourcefulness and ingenuity have brought commercial refrigeration to a high state of perfection. But in many quarters the difference in performance by experienced and inexperienced engineers is not known, with the result that mistakes are made and attract attention, while no comment is made on the many successful plants that are earning big dividends for their owners.

As transportation and shipping usually involve the application of plants greatly exceeding the capacity of the small installations sold under the name of "electric refrigeration" the writer had in mind these larger equipments, because only in these is it possible and profitable to attain the very lowest cost of refrigeration by the employment of such refinements as multi-stage compression, capacity reducers, meters, liquid coolers, etc.

The small electric plant however is rapidly gaining ground on all sides, because of its automatic features which eliminate the cost of attendance, and because of flexibility and low cost. Where the refrigerating duty and the necessary cooling surface are calculated with the same measure of judgment as is practised in well designed plants of large capacity, the results obtained in small electric refrigerating plants are entirely satisfactory to the purchasers. This accounts for the wide distribution of these little machines in both the domestic and the small commercial field, although, due to inexperience of many young members in the profession some of the commercial jobs come out disappointing to their users.

Respectfully submitted,
CHARLES H. HERTER,
Chief Engineer.
Kelvinator Sales Corporation
Long Island City, New York.

New Poster

One of a series of attractive cards used by the New York Edison Company

GERMAN TECHNICAL BOOKS ON REFRIGERATION IN DEMAND

CENTRAL ARIZONA LIGHT & POWER COMPANY
Phoenix, Arizona
August 10, 1928.

ELECTRIC REFRIGERATION NEWS,
Detroit, Michigan.

I am writing you in regard to refrigeration article page 10, ELECTRIC REFRIGERATION NEWS, August 1, 1928.

We are very anxious to obtain the following books mentioned in this article:

Taschenbuch fuer Kaeltecechniker by George Goetteche.

Die Kaeltemaschine by M. Hirsch, 1924.

Die Eis und Kaelteerzeugungsmaschinen by R. Stetefeld, 1927.

Die Eis und Kuehlmaschinen by F. W. Hoffman, 1926.

Will you kindly tell us if you have any information where we may obtain these publications.

Very truly yours,
OTTO SCHOPP,
Refrigeration Dept.

STEEL CITY ELECTRIC BATTERY CO.
105 Eleventh Ave.
Homestead, Pennsylvania
August 11, 1928.

ELECTRIC REFRIGERATION NEWS,
Detroit, Michigan.

We would like to have a catalogue of your books on refrigeration for beginners in this line of work, also the one by R. S. Stetefeld, 1927, one by F. W. Hoffmann, 1926, and other books.

W. F. BRICKNER

Correct Installation and Systematic Methods Are the Key to Good Service

Service Manager Offers to Assist in Educational Work Through Question and Answer Column

By E. Barger, Manager of Service, Copeland Sales Co., Detroit

NO doubt much good can be accomplished in the field of mechanical refrigeration service through an intelligent understanding of the fundamental principles, and ELECTRIC REFRIGERATION NEWS can most certainly be the means of enlightening many who at the present time may be without as complete an understnding as is required to insure of their success in this work.

If, in your efforts to further the science of mechanical refrigeration service, you deem it advisable to seek assistance consider me, please, as one who would consider it both a pleasure and a privilege to co-operate with you at any time.

It is, however, somewhat difficult for one like myself supervising the national activities of a vast distributing organization to always anticipate the problems of the individual, for the information desired by one may be of little value to another, and I feel, therefore, that at first it might be advisable to comment generally on the subject of service and its accomplishments.

Proper Installation Saves Service Difficulties Later

Service to me has always meant the doing of things that increase the comfort and convenience of the owner, and increase his good-will for the seller. If this is true, and it surely should be, it should behoove each and every individual who is in any way responsible for service to take advantage of the many opportunities afforded to properly serve the interests of their customers and in so doing eventually reap the many benefits always to be derived as the result of a job well done.

"A stitch in time saves nine" they say—and so with mechanical refrigeration, the foundation must be right, for it is well known that where the original installation has been properly made that the service problems thereafter are of a negligible quantity.

Salesmen of this type of commodity and service do at times—like all other salesmen—oversell their product, but it should always be considered as a most serious breach of decency and sound business policy for any service man to criticise or condemn any salesman to his customer. If your analysis discloses that the customer has been misinformed or sold the wrong size or type of unit, reserve your comments and report to your immediate superior for this will merit respect for your consideration and will prove most beneficial to the interests of your company.

Value of Records

Too much emphasis cannot be placed on the value of records. Every unit when installed should be properly recorded on a card and all service calls made thereafter should likewise be recorded, and this card should then be filed and checked at frequent intervals. Any card showing that a number of service calls have been made should immediately be considered as an indication of distress, for your customer purchased a mechanical refrigerating system in the hope and belief that here at last was a faithful servant ready to perform in a consistently satisfactory manner.

Whenever servicing such a unit, display your sterling worth and ability by first making a thorough investigation of the real cause of trouble, and proceed then to make repairs of a nature to insure of their permanency.

Don't let any one mislead you into believing that there are a number of mysterious elements in a mechanical refrigerating system for truly they are most simple and very easily understood.

Always remember that regardless of the make or type of system that the fundamental principles are the same, and that any type or size of cooling tank or coil can be satisfactorily refrigerated if the proper amount of liquid refrigerant passes through the expansion chamber and can escape as vaporous gas.

If There is a Leak—Find It

A quite frequent compaint is "my refrigerator runs constantly but does not get cold," and although it should be but a simple matter to correct this I believe that service record will indicate that in altogether too many cases the service man fails to get at the root of the trouble. Adding refrigerant proves to alleviate the immediate suffering but the patient has not been cured, for refrigerant does not disintegrate or diminish in quantity unless a leak exists somewhere in the system. FIND AND FIX THAT LEAK before proceeding further, and the harder to find the more persistent should you be in your determination, for it does exist somewhere and must be overcome or you will eventually be dealing with a very much disillusioned owner of a mechanical refrigerating system that requires constant service attention.

Should a system fail to refrigerate that you have satisfied yourself contains its full charge of refrigerant, first check and ascertain whether the refrigerant is passing through the expansion valve. In case of restriction at the expansion valve or strainer, the remedy is obvious, but should the refrigerant be passing through the expansion valve but without effectively cooling the tank or coil, check the compressor for efficiency, for with the expansion valve set for proper suction pressure refrigeration must result if the compressor is drawing the vaporous gases from the expansion coil or chamber.

Surely every service man should know how to check a system to determine various types of trouble and their causes, this being one of the most essential elements and absolutely necessary if your customers are to receive that type of service to which they are justly entitled.

A famous warrior when asked the reason for his success calmly replied—"I snatch victory from defeat." This is a most notable attribute and one with which every service man should be endowed.

As stated above, there are so many various problems that might be of particular interest to one or a number of individuals but of less consequence and importance to others, and the thought occurs to me that it might be advisable to consider the possibility of developing a section in your valuable paper for questions and answers—the questions as received to be segregated in certain classifications and replies written covering those which appear to be most generally needed.

I will indeed be very glad to lend whatever assistance I may give you if through this the interests of mechanical refrigeration may be better served.

SUGGESTS FULL SERIES OF SERVICE ARTICLES

CONE ELECTRIC CO.
Electrical Contractors
15 Third Avenue
Rome, Georgia

August 1, 1928.

Electric Refrigeration News
Detroit, Michigan.

I am enclosing my check for $1.50 for which please enter our subscription to the ELECTRIC REFRIGERATION NEWS for one year.

We hope that you will publish some good articles for the service man. For instance we would like to see you take up one refrigeration unit at a time and give us all the information you can relative to the servicing of this particular unit.

We maintain an independent electric refrigeration service department and information of this kind will be most appreciated.

M. S. CONE.

Note: Mr. Cone's suggestion is excellent and the NEWS invites manufacturers to co-operate by furnishing service information for a series of such articles. —*Editor.*

General Electric Offers a Jumbo Sales Presentation Book

The electric refrigeration department of the General Electric Co. at Cleveland, has made available a Jumbo Sales Presentation book as an aid to sales schools and demonstration work before groups.

The book is simply an enlargement of the smaller Sales Presentation book, each sheet being twenty-five by thirty-five inches. The book rests on a metal frame which is mounted on casters so that it may be easily moved about.

Copeland Dealers Attend Service School at Brownwood, Texas

A service school for Copeland dealers was held in Brownwood, Texas, from July 23 to 27 under the direction of Harry Burman in charge of service instruction at the Copeland factory. Dealers from Texas, Oklahoma, Arkansas, Louisiana, Tennessee, Arizona and Utah attended the school. The Austin-Morris Co. of Brownwood acted as hosts to the visiting dealers.

PLAN YOUR WORK WORK YOUR PLAN

From the Sales and Service Bulletin of the F. B. Connelly Co., Billings, Montana

HAVE you ever seen a kitten hide around a corner and then pounce upon a spool as though it were a mouse? Nature was teaching it to earn a living. As children you remember how hard we worked to win a game or a race? How hard we studied, planned and trained for football? Again Nature's way of teaching for future success in life.

But as we get older we are inclined to forget Nature's teaching and unless we watch ourselves and our work carefully we drift into the human failing of following the line of least resistance. And the moment any one of us reaches the point where we are complacently satisfied, that moment we begin to slip.

In every progressive business there is a constant striving to beat the record of yesterday. To beat the same week and month of previous years. Minds are constantly working, studying, planning, days, weeks and months ahead that time may be most efficiently used and to devise new and better methods that better results shall be possible. It is said that Andrew Carnegie made his success largely because of his ability to develop the spirit of contest. Putting crew against crew, boss against boss, and mill against mill. Thus forcing his men to *think* and *plan* and *act* upon those plans to win. And in doing so he made more big men than any previous executive.

It is such planning, such striving, that is driving business ahead at a faster rate today than ever before. The inside organization is under its constant pressure and the sales force receives a measure of its influence. But the salesman is still, and always must be, largely the boss of his own time and effort. That is one of the reasons why he, as a rule, can earn three or four times what an equal amount of training and effort will produce in other lines of work, depending upon this essential fact, his *real ability* to boss himself.

At times, we are amazed at the outstanding results of certain salesmen. We think them lucky or super-human, or that their territories are exceptional. Usually the true secret is planning—they spend less time traveling and more hours in front of prospects. They are never satisfied but are constantly fighting and figuring how to beat their former results. Most of us can do as well if we will give the same thought to properly organizing our work and then follow through with the same effort behind our plans.

Many outstanding salesmen can tell you 30 to 60 days in advance just where they will be and on whom they will call on any given day. But week by week and day by day planning must supplement general planning. Specifically you have not completed your work of today till tomorrow's calls are arranged so that your time may be used to best advantage and as many prospects and customers seen as possible.

Too, your record of previous calls and other information gained regarding each prospect consulted that your strategy of attack for each buyer may be arranged in advance for reasonable assurance of success.

Time and prospects are the raw materials from which all of us must smelt our results. The more carefully our work is planned, the more efficiently those materials are used, the more substantial the results are sure to be. The business you did not do today is gone forever for tomorrow brings new demands. Make each day yield its best by knowing definitely where you are going to go next and what you are going to say when you get there.

That builds confidence, that builds pride and enthusiasm and makes your work a pleasure. And "no man knows what real pleasure is until he gets it out of his business."

NEW YORK PR. & LT. OFFICES DEMONSTRATE SPARKLET ICE CREAM

The New York Power and Light Corp. is featuring in its offices throughout New York state, the Sparklets aeration system of making ice cream in the domestic electric refrigerator. A large advertisement, which appeared in fifteen different newspapers in the state on Sunday, August 12, describing the making of ice cream by the Sparklet process, gave two recipes for Sparklet ice creams and invited those interested to a demonstration of ice cream made with the aid of a Sparklet syphon and a General Electric refrigerator to be conducted at the local showroom each afternoon.

The recipes for chocolate and raspberry ice cream by the Sparklet process are given here:

Chocolate

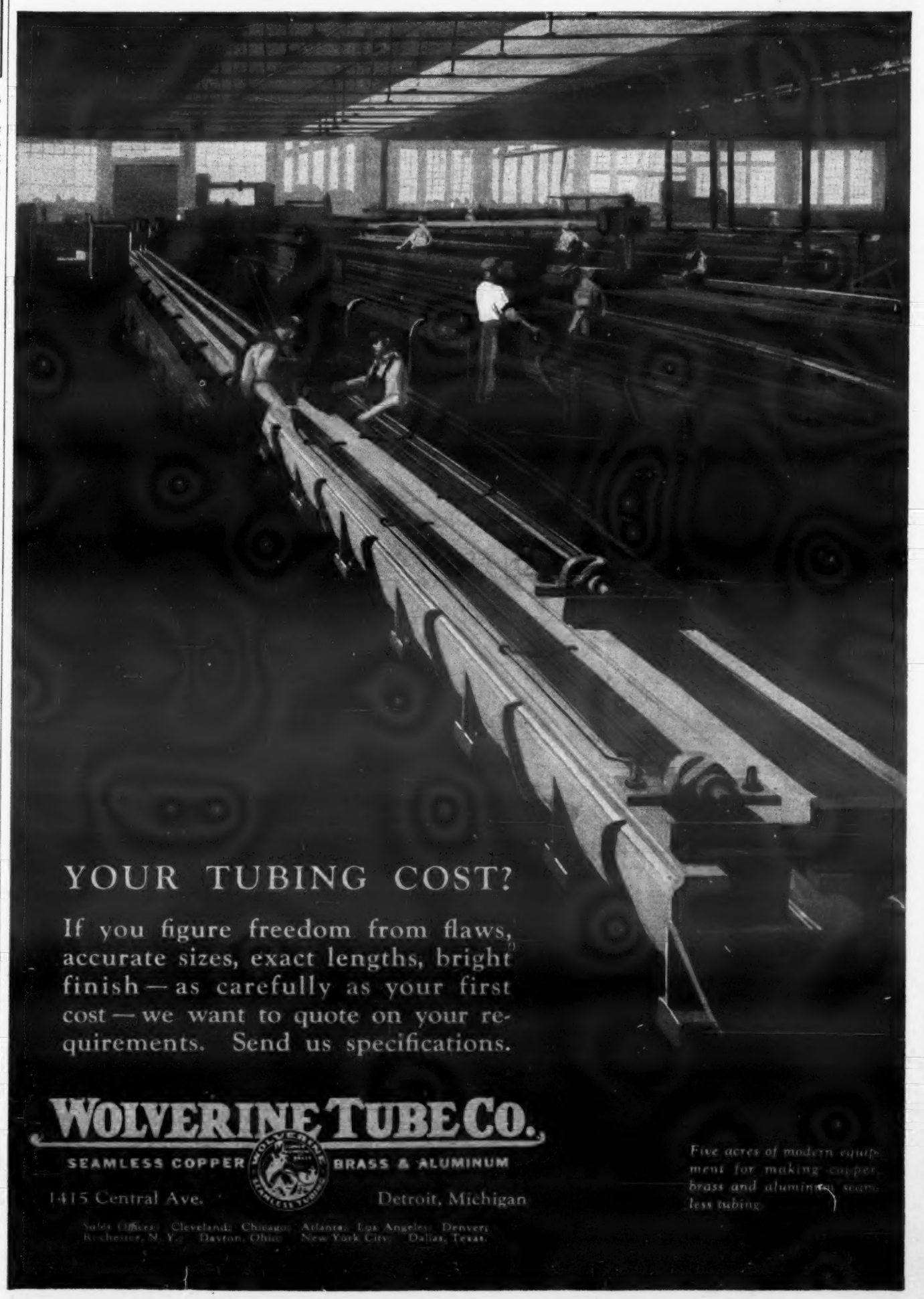
Mix ¼ cup high grade cocoa with ⅛ cup confectioner's sugar. Add 3 tablespoons boiling water. Mix into smooth paste. Beat together 1 egg, ⅜ cup confectioner's sugar, few grains of salt, and cocoa paste. Add ½ pint of heavy cream. Beat thoroughly, pour through funnel into Sparklet Syphon and aerate. Spray mixture into freezing trays and place in electric refrigerator. Takes about four to five hours to freeze.

Raspberry

Beat together 1 egg, ⅜ cup confectioner's sugar, few grains of salt, and ⅛ cup of raspberry juice. Add ½ pint of heavy cream. Beat thoroughly, pour through funnel into Sparklet Syphon and aerate. Spray mixture into freezing trays and place in electric refrigerator. Takes about four to five hours to freeze. If you desire whole berries in the ice cream, they may be added as the mixture is being sprayed into the freezing trays.

RECENT INSTALLATIONS

J. A. Seguine, 50 Washington St., East, Stroudsburg, Pa., reports the installation of Kelvinator commercial units in the J. C. Cincotta Fruit Market and the E. Deihl Meat Market in East Stroudsburg.


YOUR TUBING COST?
If you figure freedom from flaws, accurate sizes, exact lengths, bright finish — as carefully as your first cost — we want to quote on your requirements. Send us specifications.
WOLVERINE TUBE CO.
SEAMLESS COPPER BRASS & ALUMINUM
1415 Central Ave. Detroit, Michigan
Sales Offices: Cleveland; Chicago; Atlanta; Los Angeles; Denver; Rochester, N. Y.; Dayton, Ohio; New York City; Dallas, Texas.
Five acres of modern equipment for making copper, brass and aluminum seamless tubing

Kelvinator Distributor Capitalizes on Related Merchandise Display in Jewelry Shop

One of Detroit's most exclusive jewelry shops co-operating with the Dalrymple-Kelvinator Co., Detroit Kelvinator distributors, recently appealed to electric refrigerator owners with this unusual display featuring Silver Ice Balls, a substitute for ice cubes.

These balls, obtainable either in silver or aluminum finish, are attractive in appearance and will not, of course, dilute the drinks in which they are placed. Their size permits them to be placed in the freezing tray, each one taking approximately the same space as would an ice cube.

Since it was desired that the freezing unit be frosted in the display and also that the door be kept open, a larger size compressor unit than is usually used in connection with the cabinet shown was connected and placed in the basement of the store.

Bottled drinks, a number of trays filled with Silver Ice Balls and two window cards complete this novel display.

Peculiarities of Climate Are Main Resistance in Santa Fe

But Proved Economy of Electric Refrigeration Is Causing Fast Disappearance of the Outdoor Cellar

THE A. B. Gnagey Electric Co., 713 Don Diego Street, Santa Fe, New Mexico, sells electric refrigerators. Three years ago Mr. Gnagey and his associate, H. W. Brown, were disposed to look upon their refrigeration department as a side issue. Now they regard it as a large part of their business and look forward to the time in the near future when it will be the largest part of their work.

"When one looks at the map," said Mr. Brown, "the impression is that Santa Fe must be a pretty hot place. It is far south and the easterner thinks of clouds of dust, burning sands and dried up water courses. We do have some dust, we have some hot sun and we do have some dried up river beds but it would be hard for us to convince a far northern visitor that our nights are very cool until he had experienced his first one here. Our altitude is nearly seven thousand feet and the night breezes are chilly.

Cool Nights and Cool Shade

"Our cool nights, our cool shade, and the fact that we have a dry and unoppressive climate, provide the only sales resistance that we encounter. Our well-to-do residents of the city and our prosperous sheep raisers in the valley feel that their outdoor cellars have always kept the food cool and that they will always be adequate. In most sections of the country it is necessary for the salesman to show the superiority of electric refrigeration over ice. Our problem is different. We do not have to compete with ice companies to any great extent, for Santa Fe has never been an ice town. Several ice companies have tried to make a go of it here but their results have been discouraging because we have so little really cold weather in the winter. Ice of sufficient thickness to store economically does not freeze on the ponds every winter and to meet the deficiency it has to be shipped in from larger places. This is expensive and the wastage almost ruinous.

"For a time," Mr. Brown went on, "we encountered the cool outdoor cellar objection on every hand. The ice companies had combatted it and had failed. We met it by calling attention to the fact that the cellars were not cool enough to retard bacterial growth. We were able to show the economic advantages of preventing food spoilage by preventing bacterial growth and by eliminating moulds. We found that this line of argument prevailed, not only with the dealer who handled large quantities of food stuffs but also with the home owner who is able to buy luxuries. Government reports, magazine articles and the general increase in education of the people as to the habits of bacterial growths have helped wonderfully.

Valuable Gossip

Whenever one housewife installs an electric refrigerator she is certain to praise it to her neighbor. She is likely to call attention to the fact that her milk is three days old and has not soured. She will call attention to the crispness of her lettuce. She will tell how little trouble her refrigerator is. She will tell how little difference it makes in her light bills. When we get hold of a prospect who is already half sold by a neighbor, our job is easy.

"An even temperature and dependability are two things that we stress. We impress upon prospects that they can buy our refrigerating unit and forget it. Modern people have more leisure time than our ancestors. They want to use this time in a fuller enjoyment of life. We show them that they do not have to fuss or tamper with a good refrigerating plant. We stress the wholesomeness of the contents of the food storage box. In fact, there are so many advantages to electric refrigeration as compared with ice and so many more as compared with a cool cellar that we salesmen must be very unimaginative not to be enthusiastic about our product. It is easy to convince prospects that unless the temperature in a food storage container is under fifty there will be a large bacterial growth. Scientists have determined that fact for us and have given us unbiased statistics that everyone is obliged to respect.

Beware of the Old Box

"We do not recommend the installation of frost coils in old ice boxes," said Mr. Brown, "unless the ice box is a particularly good one. We have installed some in commercial boxes where the money already invested in the container was considerable. This is probably one particular in which our problem differs slightly from that experienced in large places. The labor costs on a cabinet repair job in a place like Santa Fe are likely to offset the advantages in saving the old ice box. It is practically as cheap to buy a refrigerator and it is far more satisfactory in the long run.

"We handle Frigidaire and the Delco-Light farm lighting system. The combination opens territory to us that is not penetrated by power lines. People who are able to afford electricity on their ranches find that it does not cost a prohibitive sum to install electric refrigeration. General Motors has helped us a lot in our local merchandising. Local advertisements are written by experts and run in our papers without cost to our concern. While our local papers do not have large circulations the readers have enough leisure to read them thoroughly. Santa Fe retains enough of the spirit of the old Southwest that the people are not rushing and hurrying all of the time. We have found the General Motors' local advertising to be of great value to us.

Large Stock Unnecessary

"We do not have to carry a large stock of models," Mr. Brown concluded. "At times we have only one machine with which to demonstrate. This is another advantage of the smaller place. Customers see our machine in operation. We recommend the model that we consider best suited to the needs for which the customer is buying it. Our judgment in the matter is usually accepted and we stand behind our claims and make good if anything goes wrong. The territory is not so highly competitive that we are obliged to give instant delivery on a large number of models. Our chief problem, as I said before, is to convince people that the outside or the subterranean cellar is not cool enough for the sanitary and economical storage of food."

Servel Helps Train Salesmen of Evansville Dealer

Servel Sales, Inc., Evansville, Ind., manufacturers of Servel and Electrolux units, has adopted a sales plan in the interest of the Southern Indiana Gas and Electric Co., local dealer. Salesmen are hired and trained under the direct management of Servel, Inc., and work up sales and make returns from prospective lists furnished by the dealer. Salesmanship training is supplemented by inspection of the production departments at the Servel factory.

GLOSS LACQUER ENAMEL FINISH
VS
CLEAR TOP COAT FOR
REFRIGERATOR CABINETS

M&W Co. 1876

The M. & W. White Refrigerator Finishing system has been adopted after thorough investigation by large users in preference to Flat White Lacquer Enamels and Clear Top Coats for the following *reasons;*

1—*Uniform* beautiful sheen.
2—Fewer *Materials* kept in stock.
3—Similarity in composition of each coat, making a *Homogeneous*, tough, durable film.
4—Does not bleed *Yellow* from undercoats.
5—It is more *Durable.*
6—The color is *Permanent.*
7—Not affected by *Moisture.*

Spray coats of M & W Oil or Lacquer Primers followed by M & W White Lacquer Enamel produce a LASTING, BEAUTIFUL FINISH.

Available in any required color.

MAAS & WALDSTEIN CO.
METAL & WOOD
LACQUERS AND ENAMELS

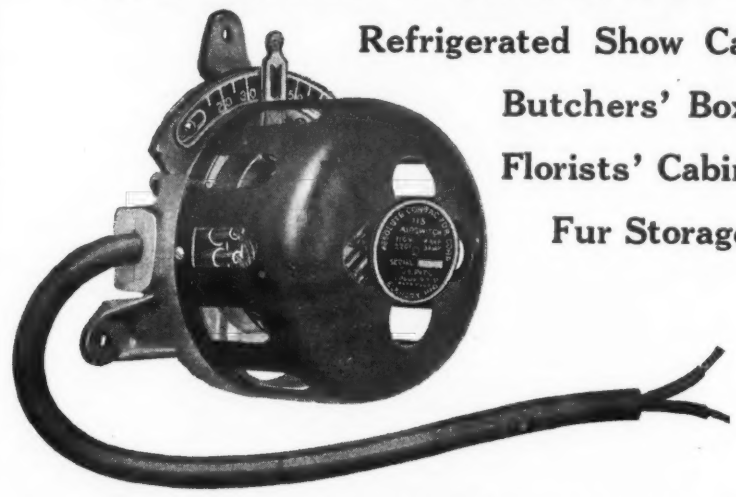
EXECUTIVE OFFICES AND PLANT, 438 RIVERSIDE AVENUE, NEWARK, N. J.

CHICAGO OFFICE AND WAREHOUSE
1115 Washington Blvd. West

LOS ANGELES OFFICE AND WAREHOUSE
1212 Venice Blvd., Los Angeles, Cal.

Automatic Control for

Refrigerated Show Cases
Butchers' Boxes
Florists' Cabinets
Fur Storage



Con-Tac-Tor AIRSWITCH *List Price* $18

Direct control of refrigeration units from changing air temperatures is effectively and economically accomplished by this instrument.

WRITE FOR BULLETIN 121

ABSOLUTE CON-TAC-TOR CORPORATION
ELKHART, INDIANA

IT'S EASIER
to handle
a refrigerator
equipped with this
jacket *and* sling

BOTH your customers and you will benefit by delivering refrigerators wrapped in the Webb Slingabout. It eliminates all untidy crating and packing, prevents scarring walls and woodwork when delivery is made and places refrigerators in the home without a single blemish or scar.

Your truckmen are able to unload with greater safety and speed. The heavy padded canvas jacket is equipped with 3-ply belting slings. These slings enable your men to get a good sure grip. Even the heaviest models may be safely and quickly handled.

Webb Slingabouts are carefully constructed of fine durable materials and can be used over and over again.

Slingabouts are made in sizes to fit every make and model of refrigerator. The attached coupon brings you complete information. Fill it in now!

WEBB *Slingabout*

CHARLES J. WEBB & Co.
116 Chestnut Street
Philadelphia, Pa.

Charles J. Webb & Co.
116 Chestnut St., Philadelphia, Pa.
Please send me full information about the Webb Slingabout.
Name .....
Address .....
Make of Refrigerator .....
E.R.N. 8-15-28

Here Is a Dictaphone Record of a Successful Sales Talk

Experienced Book Salesman Presents Proposition in "One Minute and a Half." Every Word and Action Carefully Planned in Advance

By James P. Gourley

Editor's Note: During the course of a week a considerable number of people call at the offices of ELECTRIC REFRIGERATION NEWS. Advertisers occasionally favor us. Subscribers from distant cities drop in to get acquainted. Business men, engineers, inventors, salesmen and others call to get information—to discuss new projects. Many interesting items of news are thus secured and much important information about the affairs of the industry is collected.

Along with these most welcome visitors, and the regular calls of salesmen from suppliers of material and service, the NEWS gets its share of agents and solicitors for insurance, real estate (Detroit and Canada), exclusive clubs (in process of being organized), office devices (new and second hand), and all manner of charities. The NEWS being young, and as yet unspoiled by excess profits, endeavors to maintain the policy "Be courteous to every caller—he might be a customer."

When Mr. Gourley, representing Scribners of New York, entered the NEWS office a few days ago, it may be, therefore, that he did not meet with the customary resistance, but it will be seen later that he was fully prepared to meet any emergency. Mr. Gourley, having been announced, entered. He immediately started his sales talk. In one and one-half minutes he had an order—but he had to do something more to bind the bargain, namely, to repeat his sales talk word for word into a dictaphone and explain the "why" of each step in his presentation.

Read it carefully. Mr. Gourley has selected each word and planned each step so as to get maximum attention and avoid interruptions. He has learned to conserve his own time and does not waste it in fruitless effort. He is selling a set of books and anyone who has tried it will agree that the job of the "book agent" is not an easy one. Surely selling electric refrigeration is much easier and more inspiring.

While the particular methods used by Mr. Gourley are not applicable to electric refrigeration, many of the *principles* used are well worth the study of any specialty salesman. Mr. Gourley's sales talk follows:

MR. COCKRELL, my name is Gourley. I have a little present here for you. This is a picture of Colonel Lindberg and is presented to you by and with the compliments of Scribners of New York City. You are in no way obligated to them and I am sure you are not obligated to me in any way for that, Mr. Cockrell, but there is a little story that we like to tell in connection with that picture, Mr. Cockrell, which takes me just one minute and a half to tell and after I am finished your answer will be respected—either yes or no. The only difference will be you will have the picture and I will be on my way, and we will still be good friends.

We take this means of presenting to you Andrews' Complete Outline of American Events. Now this is something entirely different from anything that has ever been published before. It is a history that is written in a story form which makes it very interesting to read. This history is wonderfully illustrated, Mr. Cockrell, and contains more than 600 pictures and maps and dates from our year 1,000 up to and including Colonel Lindberg's flight to Paris in the year 1927. It comes to you in six volumes bound in our beautiful Artcraft, the latest thing in the book binders art, and as you know Mr. Cockrell, all histories when first published sell for $10.00 a volume and up. Although this is a good history we are placing it on our special subscription offer this summer for $39.00 and our terms are $3.00 a month.

But Mr. Cockrell, we don't want you to think that you will be out the $39.00 which you hand up for this for we will hand this right back to you, and immediately, by including absolutely complimentary without a penny additional cost our regular $39.00 set of Copeland's Treasury for Book Lovers. Now this is the largest and most complete anthology of English literature that has ever been put within five book covers. It contains a collection of 539 masterpieces dating from our early translations of Homer down to and including our present day writers such as Ring Lardner, and Sherwood Anderson. The author of this is Professor Charles Townsend Copeland who has been English teacher at Harvard for the past 38 years and who is there at the present time. He has compiled this collection from these 194 writers displayed before you here. This is called the cream of the Harvard Classics and is being taught at Harvard University at the present time.

And to prove to you conclusively that we want your friendship instead of your money we also include in this offer Robert Louis Stevenson in five volumes which sells for $15.00 in any book store and is bound in our genuine alligator Artcraft.

And believe it or not, and you may smile when I tell you this, Mr. Cockrell, but to those taking advantage of this offer at the present time will also go Horniday's American Natural History in one volume. This contains more than 600 photographs of birds, fish and animals all in colors and is of universal interest to every member of the family.

And to show you that we really appreciate your business and that you cannot possibly say "no" on your own behalf we also include Scribners for 12 solid months. Now to show you that there has been no misrepresentation on my part, here is a Scribners order blank showing you exactly what you get. You get the history in six volumes bound in our beautiful Artcraft for $39.00. We also include absolutely complimentary Copeland's Treasury for Book Lovers in five also bound in the Artcraft, Robert Louis Stevenson in five, also bound in our genuine Artcraft, Horniday's Natural History in one in Artcraft binding and 12 solid months to Scribners. You get the entire 17 volumes and 12 months subscription all for the price of the history alone, $39.00, and our terms are $3.00 a month. Everything prepaid and are in your possession within the next 8 or 10 days. Could you possibly say no to that offer today?

Editorial Note: Mr. Cockrell immediately agreed to sign the order provided Mr. Gourley would repeat his presentation into the dictaphone, so that it could be transcribed for publication in the NEWS, and also explain the purpose of each step.

Following is Mr. Gourley's explanation of his methods:

THE presentation of the photograph is naturally done to get the prospect in a good frame of mind. The second part is that I have asked the prospect for a minute and a half of his time and have emphasized the fact that I would respect an answer either yes or nor when I was finished. This I do unless I see my prospect is interested and is willing to give me a few moments of his time to explain my proposition more thoroughly.

I am always courteous and polite to my prospective customer and will never argue with him. If he should become hostile in any manner I fold up my samples and bid him good-day in a polite manner. I have used this method of selling for quite some time and it has proved very successful and has increased my sales greatly.

The specialty salesman should always remember that his living is being derived from his prospect's time and not his own. In my line of business I have the greatest barrier to break down at the beginning, for 98 per cent of my prospects have an office girl that I must get by, and I must get to my prospect without disclosing the nature of my business to his secretary. But still I must do this in a manner that will leave her in a good frame of mind so that when she presents me to her superior she will do so in a manner that it will have no bearing on the nature of my business or myself whatsoever.

You will notice in my sales talk that I bring out my customer's name quite often. This is a very important factor. The reason for this is that by mentioning his name I am keeping his mind strictly on my subject. Oftentimes there will be another gentleman seated at the same desk with the man I have called to see. In a case of this kind I introduce myself only to the man I have called for. I, at all times, give my attention to him and none whatsoever to the other gentleman. The reason for this is I have called to see him and no one else. This often impresses the man you are talking to.

One of the most important factors in specialty selling, especially when one is working the professional man, is that, upon entering an office, if the salesman calls for Mr. Jones or Mr. Smith and he is out, be sure not to ask for any one else. Leave the impression at all times that you wish to see him and no one else. Immediately leave the office and see him on some other date—never take up his help's time as he might enter before you leave.

Always give your sales talk in a suggestive tone of voice, and at all times avoid talking too fast. Watch yourself because you must remember that you are repeating your canvass over and over, day in and day out, and if you are not careful you will come to the point where you will be singing your canvass instead of talking it in a suggesting manner, and when one gets to this point he might as well fold up for a day or two as he is not only exhausting himself but good territory as well.

I put my heart and soul into my selling and at all times listen to my own canvass when I am talking to a man. My mind is at at all times on my business and when I find myself growing stale and I begin singing my canvass I fold up and correct myself. This is an obstacle any man using a canvass must overcome if he ever expects to be successful in his line of business.

Always guard against letting your prospective customer form the opinion that he is doing you a favor by buying your product. Create a demand and give him the impression that you are doing him a favor by putting your product before him and that he is not doing you any favor whatsoever by buying it. The minute the prospect gets the impression that he or she is helping you by taking your offer, the sale is lost. Always sell him on your product's merits only. A good front is essential to any salesman. Never give the impression that you are in need.

I at all times set a goal each week for the orders I must get, especially during the summer months. Any man in the specialty line of selling is working under a strain at all times and if he tries to overdo his work he will grow stale before he knows it. If I get my desired production within the first three or four days of the week in the hot weather period I rest up the balance of the week and am in good condition to start to work Monday morning again. But if I have not got my desired production even when Friday night comes I will work up until Saturday noon until I get it. In this way you are not overdoing yourself in any way at all.

Never let a bad day, or bad two days affect your business as this is bound to happen most any time to any one. The big secret is to have nerve and to call on the right people and keep working until you get your first order, and then the next one will come easy. One essential is to make it easy for the next fellow who is following. If you ask a man for a few minutes of his time and he grants your request, when you have given him your sales talk and find he is not interested in any way, the best thing you can do for yourself and for others following in your footsteps is to fold up and get out. Leave him in good spirits and bid him good-day.

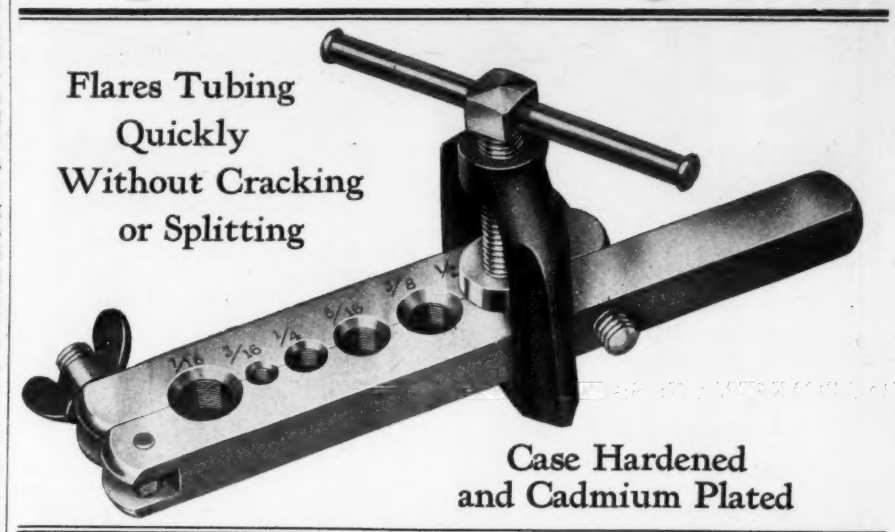
The main thing to remember is that the old method of high pressure salesmanship which has been used for the past few years extensively is gone forever. Be polite and courteous. A convincing talker is the one who is most successful in the selling field today. Just remember that many orders have been sold not because the prospective customer wanted the article that was before him but because it had been presented to him by the salesman in such a manner that he bought it. In other words the customer was so impressed by the particular salesman that he didn't hesitate a moment to buy it. That could be called selling yourself to the customer.

Neat, plain, conservative, clothes should be worn at all times. They must be plain and not exaggerated in any way. Flashy clothes, such as bright neckties, and colorful hatbands must be avoided. A dark suit of clothes will go farther to increase your sales than most anything you could wear. To be in step with fashion does not mean to be extreme in your dress.

At least fifty per cent of salesmen have some weakness in their selling—the majority in closing their sale. The way to overcome this is to use the power of suggestion. In selling an article you are not familiar with never be afraid to ask your superior about the product. The more questions you ask them the better you will be. Be familiar with the article you are selling so you can give points why it should be used by your prospective customer and be able to give intelligent answers to his questions. If you do not ask questions from your superior you will never know just what you are selling and you will lose sales daily.

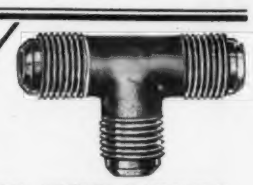
Imperial Flaring Tool

Flares Tubing Quickly Without Cracking or Splitting



Case Hardened and Cadmium Plated

The new Imperial Flaring Tool gives the proper flare and taper to tubing for making up joints. A perfect flare means a tight joint, and this tool does the work in the least time and with the utmost simplicity. No loose dies—no vise necessary. Tubing can be clamped, flared and removed in less than 30 seconds.
No. 93-F takes tubing sizes 1/8", 5/32", 1/4", 5/16", 3/8", and 1/2". Each $3.00
No. 95-F takes tubing sizes 1/4", 5/16", 3/8", 1/2" and 5/8". Each $4.00



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BRASS FORGINGS
Accurately made to meet all the requirements of Iceless Refrigerator Manufacturers. Will not leak. Let us quote on your requirements.

HOUSEHOLD QUALITY SERVICE COMMERCIAL

HERRICK
THE ARISTOCRAT OF REFRIGERATORS
for
ELECTRIC REFRIGERATION
HERRICK REFRIGERATOR CO.,
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SULPHUR DIOXIDE

ANHYDROUS SULPHUR DIOXIDE

Universally used in the production and servicing of refrigerating machines.
Prepared for direct charging, with absolute protection afforded by complete laboratory analysis of each cylinder, large or small.
Exceptional dryness maintained as an additional safety factor
Ten sizes of cylinders from 2 lb. to 150 lb. capacity.

SO_2

ANSUL CHEMICAL COMPANY
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Canadian Distributor
GRASSELLI CHEMICAL CO. Ltd.
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A Mechanical Device Sealing Any Rotating Shaft in the Stuffing Box and Revolving *with* it.

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20 North Green St. Dept. E CHICAGO, ILL.

—one piece pressed aluminum.

—securely interlocked, removable grids.

—we'll be glad to quote in any quantity.

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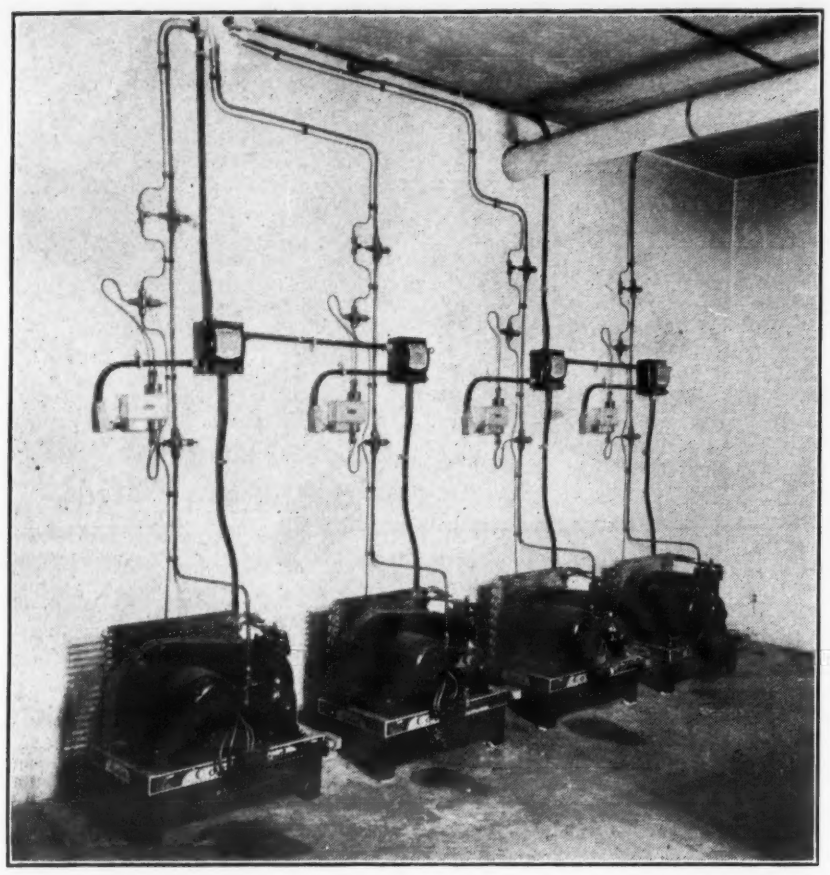
FRANKLIN AIR COMPRESSOR CORP. NORRISTOWN, PA.

Air and Water Cooled Multiple Jobs By Strelinger-Copeland, Detroit



An installation of four model R Copeland air-cooled units of one-half horsepower each, refrigerating thirty-three apartments at 60 Clairmont Avenue, Detroit, is shown above. These units have two cylinders each, are belt driven and operate at 440 R. P. M.

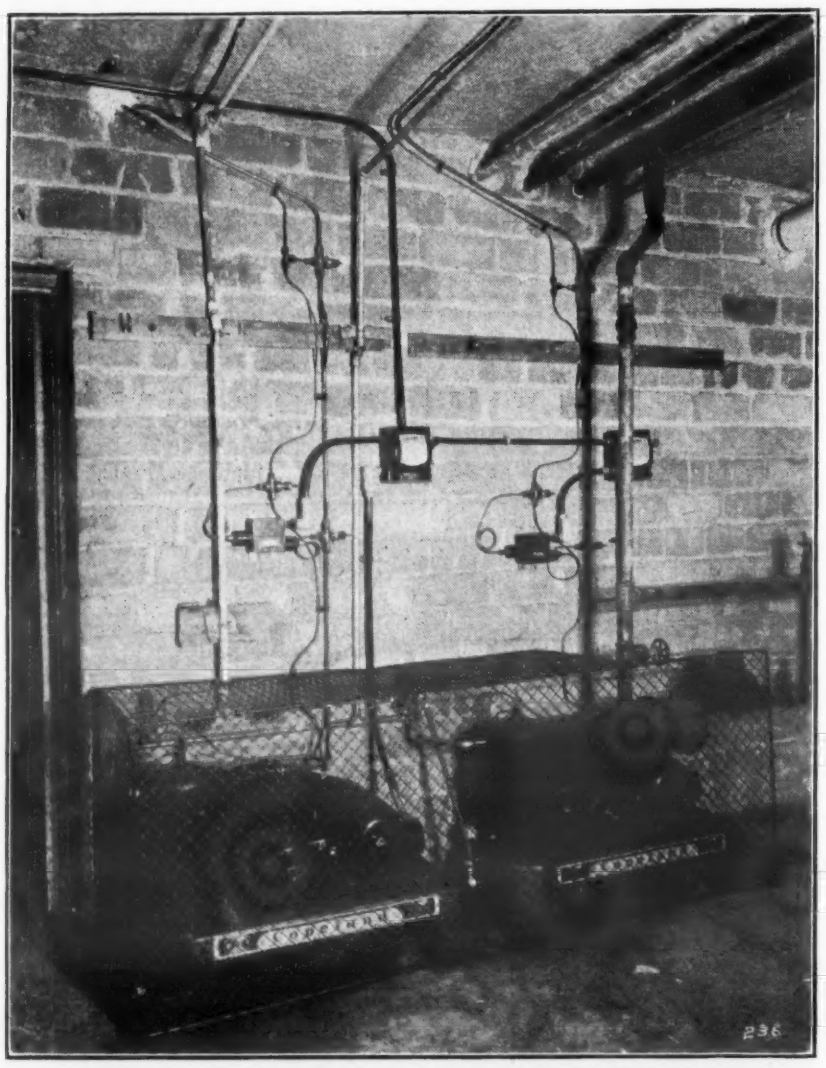
The liquid receiver under the base of each compressor holds six and one-half pounds of methyl chloride and each valve chamber header in the thirty-three apartments holds three and one-half pounds of the refrigerant.

American Radiator high and low pressure controls are used. The connecting tubing is looped just before reaching the control. This loop acts as a pressure equalizer on the control. The Square D switches are padlocked in each case to prevent tampering.

The shut-off valves which can be seen at the top of each riser control the flow of the refrigerant from the compressor below. The two valves just above and below, the American Radiator controls make it possible to service the control by shutting off these valves, without cutting down refrigeration in the cooling units connected with that line. In addition to this each cooling unit has its own shut-off valve so that it may be serviced without affecting the other units connected with that riser.

The lower photograph shows two Copeland model W, water-cooled units of three-fourths horsepower each. On these units the compressor is air-cooled and the condenser water-cooled. Refrigeration for twenty-four apartments is supplied by these two machines each of them carrying twelve refrigerators. The hook-up of controls and valves is the same as that described in the upper installation.

These units each have two cylinders, have a double belt drive and operate at 260 R. P. M., which it will be noted is somewhat slower than the smaller air-cooled models first described. This equipment has been in use for some time in the Talbot apartments, Detroit. Both installations were made by the Strelinger-Copeland Co., Detroit distributors.



General Electric Building New Refrigerator Plant at Erie

The General Electric Co.'s refrigeration department has under construction at Erie, Pa., a new unit for producing complete porcelain enameled electric refrigerators. A large and strictly modern porcelain enameling plant which will be equipped with General Electric enameling furnaces is being installed now by The Ferro Enamel Supply Co. of Cleveland, Ohio.

G. E. Distributor at Evansville Gets Territory in Kentucky

The Electric Refrigerator Co., 318 South Sixth Street, Evansville, Indiana, General Electric refrigerator distributor, has entered Kentucky territory with the addition of Henderson County, according to S. A. Schmitt, manager. The Henderson Plumbing Co. has signed as dealer in Henderson, Ky. The Electric Refrigerator Co. now covers 18 counties of the southern Indiana and Illinois, and western Kentucky region.

Local News Correspondents and Subscription Representatives Wanted in Every Community

UP to the present time the subscription list of Electric Refrigeration News has been built almost entirely by the "sampling" process. Sample copies have been mailed to lists of distributors and dealers in refrigeration equipment and to well-rated retailers in other fields which may logically be considered as prospective sales outlets. Many names have been furnished by readers and special lists have been secured from a variety of sources.

Thus the News has been its own salesman. The returns have been continuous month by month. In fact, subscriptions have been received about as rapidly as they could be taken care of properly.

This natural method of building circulation has had its advantages. Those who enrolled as subscribers did so because they were quick to see the value of the paper---no selling effort was necessary to convince them of its merit. We believe, therefore, that the present 6,000 subscribers represent the most active section of the industry.

Numerous letters are received from subscribers, however, indicating that a considerable number of individuals are still depending upon borrowed copies of the paper. New subscribers frequently indicate their disappointment in not having had an opportunity to become acquainted with the News earlier. Furthermore, the industry is constantly growing.

We believe that the time has arrived for a careful analysis of the field of service with a view to securing an enrollment which may rightfully be said to include "every worthwhile company and individual in the electric refrigeration business." A study of the geographical distribution shows that in many localities there is, as yet, an inadequate number of subscribers to be truly representative.

On account of the highly specialized service of the News, there is no desire for mere numbers. Only those who are directly connected with the industry are wanted as subscribers. The number in any community is fairly definite. For this reason, the News desires to appoint as subscription representatives, and as news correspondents, only men and women who are actively engaged in the refrigeration business and who know the people who should be regular readers of the paper.

The opportunity is not for full time employment. The proposition calls for a limited amount of effort which will not interfere with regular duties. Subscriptions may be secured and news items reported as a by-product of business and social contact. A nominal commission will be paid for each subscription secured and suitable compensation will be given for news material as published.

Those interested are invited to write for full information without delay.

ELECTRIC REFRIGERATION NEWS
554 MACCABEES BLDG. DETROIT, MICH.

The Refrigeration Market In and Near Omaha as Seen By the Nebraska Power Co.

Survey Shows 46,000 Wired Homes of Which Only 4,050 Now Have Electric Refrigerators. Big Field In Water and Milk Coolers

By Charles P. Rodman

"WHAT of the field for electric refrigeration in and near Omaha?" This was the question asked of W. J. Krug, in charge of the New Business department of the Nebraska Power Co., Omaha.

"Well, here are the figures covering the situation at the present," said Mr. Krug. "Omaha has a population of about 210,000 people at the present time. That means a possible 52,000 homes. Of that number our records show 46,240 of those homes are wired and now using electricity furnished by the Nebraska Power Co. In addition to this number there are 2,000 more outside the city that are served from Omaha."

Information from another department of the Nebraska Power Co. disclosed the fact that a new high power line of twenty-six miles would be constructed yet this season at a cost of about $400,000. This line will supply the villages of Valley, Elkhorn and Waterloo as well as the farm homes along the route; that means at least another 2,000 will soon be using current. Here will be a field of over 50,000 homes wired and ready for any electric equipment the owners may desire.

Mr. Krug further stated, when asked if the Nebraska Power Co. had ever made a survey of the territory as regards electric refrigerators, "Yes, we have and I have every reason to believe that 4,050 electric refrigerators in actual use in this territory at the present time would cover the field." Suppose the possibilities of supplying the homes represented is considered for a moment. Take 80 per cent of the homes as representing the prospects for electric refrigeration, which would mean in figures at least 40,000. Only 4,050 of these are now supplied. One can readily see the possibilities in the way of selling electric refrigeration.

This would mean two machines in many places, especially with the farmers as many of them are engaged in dairying in a small way and there would be the opportunity to sell both domestic and the milk cooler.

Another big field is in connection with the ice cream dealers. Kelvinator, the machine handled by the Nebraska Power Co., has just made a contract with one of the larger ice cream factories of Omaha to supply this company with a large number of the machines. The ice cream people in turn sell to all local dealers carrying that specific brand of ice cream.

"What has been the condition as compared with sales last season?"

"Sales are far over the same time last season," said Mr. Krug, "and they have been much easier. The big educational campaigns by several of the makers of electric refrigeration have helped us. This is an instance of where opposition boosted our sales to a remarkable degree. The people have now accepted electric refrigeration. That means it is only a matter of time and money when all will be supplied. I know of no better selling field at the present time than electric refrigeration."

"Who are the best prospects at this time for electric refrigerators?"

"That is hard to say," said Mr. Krug, "as we have found both the home owners and the man on a fair salary are buying liberally at this time. My opinion is that there is not much difference; neither is there much difference as between the home owners and tenants. The latter have investigated and found that after the installation charge has been paid that it is a cleaner and cheaper proposition than under the old system of icing. The man on a salary of $2,500 to $5,000 is just as good a prospect for electric refrigeration as the man who owns his home and is in business."

"What per cent of the buyers pay cash?"

"About thirty per cent," said Mr. Krug. "The others take advantage of the finance plan, although a large percentage of these pay out long before the time the contract expires. In selling, the Nebraska Power Co. allows the customer the cash price if the bill is paid within ninety days. Many of the purchasers take this plan of paying and the result has been to increase sales to a large extent with the higher salaried men."

Mr. Davies is sales manager for the refrigeration department of the Nebraska Power Co. He has twenty men assigned to the city territory at present and has gone way over his quota for the first five months of the year. Investigation showed, under the present selling plan, that it takes on an average of five calls to make a sale now where a year ago is was almost double that number.

The Nebraska Power Co. also reports a large increase this season in water cooler and dairy equipment sales. The up-to-date building manager has found it is an actual saving to install electric water coolers. He has also found the coolers an aid in making satisfied tenants. While with the farmers, especially those who are handling many cows for milk purposes, the dairy cooler has been a real blessing. "Notwithstanding all this the real field at the present time, and for many years to come, I believe," said Mr. Krug, "is the home."

"Have apartment house owners and managers of big rental houses seen the light yet in regard to electric refrigeration?"

"With the Nebraska Power Company, no," said Mr. Krug. "Although I understand that tenants are making quite a 'kick' and in many instances will not rent where there is no electric refrigeration. In time it will be the rule to fit all apartment houses with electric refrigeration which aids in renting property and also secures a better class of tenants. The idea is fast gaining ground in this locality and it is just a question of time when all large properties for rental purposes must be equipped with electric refrigeration.

Despite the heavy sales reported by the dealers in Omaha, all say the surface has not yet been scratched. All admit there should be a continuance of the educational advertising campaign. While there seems to be a general awakening to the value of electric refrigeration, yet the people are prone to forget. Another good crop for the farmers of Iowa and Nebraska will mean an astonishing increase in the sale of electric refrigerators the coming season.

Business in Omaha virtually depends on the financial condition of the farmers, as there are few factories. The outlook now is all to the good and refrigerator dealers agree that this has much to do with the heavy sales at this time.

Proprietors of Roadside Stand Claim Their Kelvinators Invaluable

By H. L. Coffin

There are two Kelvinators in The Arches Cafe, a roadside refreshment stand in Southern California, and the women proprietors are frank in acknowledging that they have been two powerful allies in the spectacular success of their business venture.

One of the Kelvinators is built into a second-hand ice box which they bought at a bargain and does its work in the kitchen and the soft-drink stand which connects with it. The other was built in this spring, at the beginning of the second season of the business, when the space was more than doubled, and is convenient to the lunch counter.

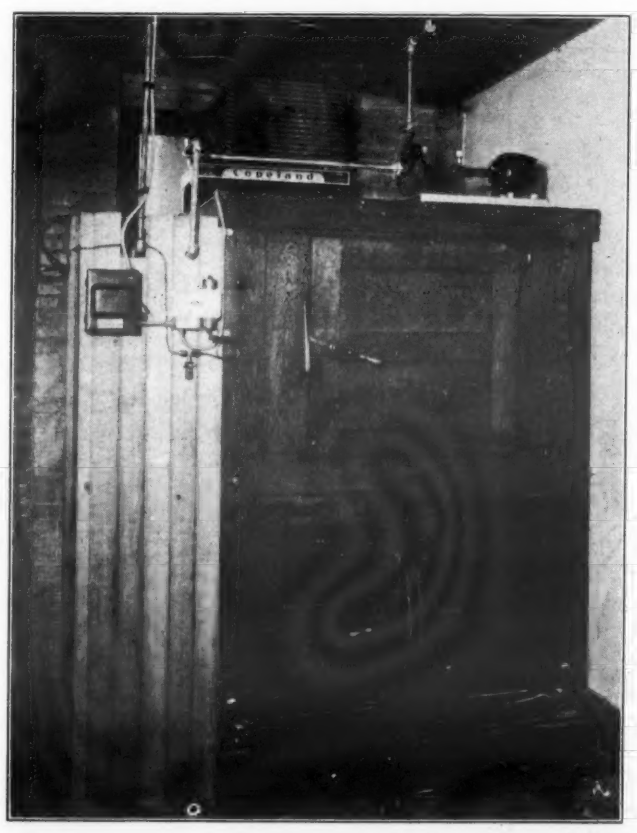
Fern and Anna Vilelle are the owners. I interviewed them and they had so many reasons why they liked electric refrigeration better than ice that they could hardly wait to tell me. The usual reasons given by all users were a part of their story: more convenient, less dirt, less trouble, more sanitary and healthful. But they had some added ones peculiar to their trade.

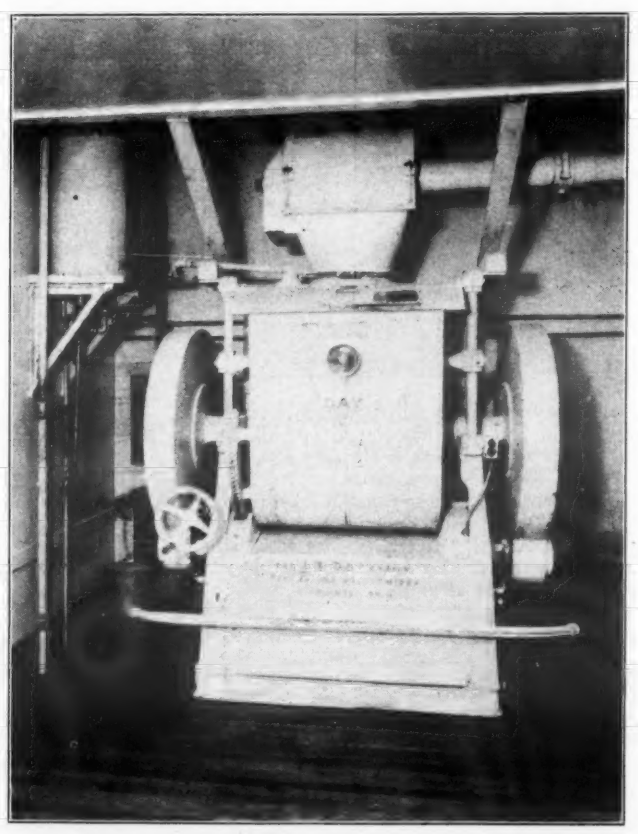
A roadside refreshment stand, open twenty-four hours every day during the season from Decoration Day to Labor Day, and twelve hours a day the rest of its year, has its own problems. "It's a shifting crowd," they told me, "and one that weather has a lot to do with. Fortunately here in California rain doesn't often interfere but it may cool off suddenly, or a fog roll in for a few days or the wind blow a gale, and then the motoring public takes to the mountains instead of coming down to the beach. So if we have stocked up for somewhere near the usual crowd, we would be out of luck if we didn't have our Kelvinators to keep things from spoiling.

"And on the other hand, some days for no apparent reason that anybody can foresee, everybody comes to the beach. If we were depending on ice refrigeration, we could not store up for an emergency, the way we can now, and would soon be sold out. A part of the success of our business is our custom of buying when and where the prices are best. This means we must have storage room, so that we can keep what we have bought in quantities when the buying was good, until there is demand for it. This is easy with canned goods and staples but impossible with perishables unless you have an electric refrigerator.

"Another advantage of inestimable value to us is the fact that an electric refrigerator keeps everything so constantly cold that it actually tastes better. Salads are crisper, butter harder, and ice creams more perfect. This helps us in our 'repeat' customers, always an important part of the buying public.

Circulating Water Pump and Special Control for Dough Mixer In a Pittsburgh Bakery





Above is shown a model R Copeland unit installed in connection with a cooler and a low speed dough mixer in the Tietsworth Bakery, Kittaning, Pa. The electric water pump shown on top of the cooler is used to pump cold water from a tank adjoining the cooler to a measuring tank near the dough mixer. The measuring tank is shown above and at the left of the dough mixer in the right hand picture. Since the photograph was taken the cold water lines and the measuring tank have been insulated with cork.

The tank at the side of the cooler has in it a number of turns of copper tubing through which the gas is expanded to produce the refrigeration. There is also a tank with coils in the cooler. Only one expansion valve is used on the job. The gas is first expanded through the coil in the cooler and then through the coil in the water tank. In a case of this kind, where an expansion valve is used, a line of copper tubing is run through the tank which requires the most exact temperature and on the end of this tube is placed a bulb. The line and bulb are charged with gas and the control then regulated so that the unit will start and stop the system according to these pressures. In this installation there is also a Lassen control in the cooler hooked up to the compressor. It is set for a brine temperature of 25 to 28 degrees. The control operating the water tank is set from 38 to 44 degrees. The compressor will then run as long as water is being drawn from the water tank or the temperature is above that at which the control is set. In a like manner the temperature of the coolers is controlled by the brine temperature setting on the Lassen control. With this arrangement the compressor will run until both requirements have been satisfied.

The installation was made by the McKean Company, 5925-5927 Baum Blvd., Pittsburgh, Pa., Copeland distributors for western Pennsylvania.

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Increased rate takes effect September 12.

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FORGED BRASS VALVES for Mechanical Refrigeration
Quality Shut-off and Cylinder valves in any standard designs or to your specifications.
KEROTEST MANUFACTURING CO.
2525 LIBERTY AVENUE
PITTSBURGH, PENNA.

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For all commercial jobs you will find NOVOID Corkboard Insulation the most satisfactory insulating material for the purpose. It is convenient to use. It comes in 12"x36" and 24"x36" sheets, in 1", 1¼", 2", 3", and 4" thicknesses. Shipped in strong fibre containers, each containing 72 board feet. Samples on request.
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CORK IMPORT CORP.
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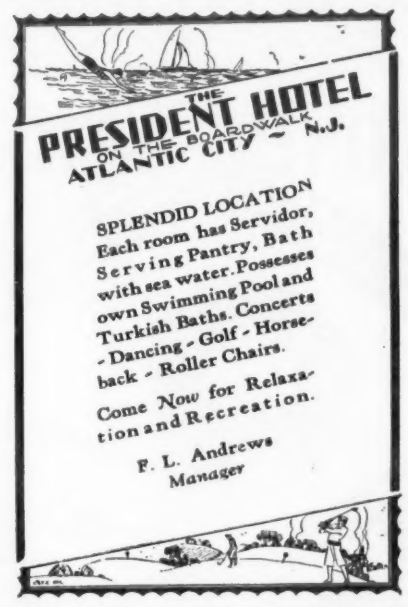
Branches in Principal Cities

The leading refrigerator manufacturers are buying
BOSLEY'S
"Ice Saver" Gasket
for it is the best uniform quality insulation
Write us
The D. W. Bosley Company
1901 Carroll Ave. Chicago, Ill.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ATLANTIC CITY - N.J.
SPLENDID LOCATION
Each room has Servidor, Serving Pantry, Bath with sea water. Possesses own Swimming Pool and Turkish Baths. Concerts - Dancing - Golf - Horseback - Roller Chairs.
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F. L. Andrews
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POSITIVE RANGE AND DIFFERENTIAL ADJUSTMENT
NON-DETERIORATING MERCURY TUBE SWITCH—MEET ALL REQUIREMENTS
GOODNOW & BLAKE MFG. CO. 3840 BEAVER STREET DETROIT, MICH.

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A sample test motor will be shipped to any interested manufactured on request.

TO the designing and construction of a motor for refrigerating systems especially, Day-Fan Electric Company has brought the experience of 39 years of manufacturing high grade electrical apparatus. Day-Fan fans and motors have won world-wide recognition for dependability.

High power factor and efficiency, low initial cost, low cost of operation—are characteristics of the Day-Fan motor.

THE DAY-FAN ELECTRIC COMPANY
DAYTON, OHIO

Electric Refrigeration Pays Direct Returns to California Diary Plant

York, Frick, and Frigidaire Systems Used Assure a Perfect Product that Is Sold with a Guarantee at a Premium

By John Girdler

JOHN CHAMNES, president and general manager of the Gold Medal Creamery, 2707 East Anaheim St., Long Beach, Calif., in talking about electric refrigeration as an aid to the public popularity of dairy products, says:

"We think enough of electric refrigeration that we could not get along without it ourselves. We use one York and two Frick machines in our plant. That is only half the story, however. We offer a premium of two cents per pound for milk that is from 100 per cent tuberculin tested cows if it is cooled to 38 to 40 degrees Fahrenheit immediately after milking.

"The dairies have responded so promptly to our bonus offer that we now have our pick of milk and we are certain of its condition because of electric refrigeration. So thoroughly have the dairies responded that we are able to get sufficient milk for one of the largest plants in southern California in a section only 40 minutes from our Gold Medal Creamery."

The advantages of the cooling systems in our plant are apparent to every creamery man at once. Doubtless the indirect advantages are equally valuable through the better conditioned milk that we are able to buy. In the first place we can guarantee our milk for 48 hours without the slightest fear of falling down on our contract. In the second place there is a most considerable advantage to us in an advertising way. The fact that we are extremely careful in the selection of the product that we are vending to the public is rapidly spread by word of mouth. Our employees can speak with more assurance about the excellence of our products and this is no small element in salesmanship. In other words, our employees are "sold" on our merchandise. In the third place, our campaign for wholesome milk and our willingness to pay for a superior product ties in with the trend of the times and with public opinion. Interest in sanitation of food products has grown enormously in the last few years. We are known to be in line with the most progressive ideas of this general health movement.

"It would be impossible to overlook the value of domestic electric refrigeration in a consideration of this sort. Anything that tends to make home refrigeration more effective tends to promote the use of articles that are delicious but perishable. Any device that makes the preservation of food easier and pleasanter is a boon to us. Butter and milk may stay fresh until used without electric refrigeration, but the better and more modern type of refrigeration certainly adds to the feeling of safety which people experience in the use of such foods.

"Butter may stay fresh, even without any type of cooling but it will not stay firm and it will not be so inviting. It is one of nature's best foods and deserves the best of care. Ice cream may remain cold until eaten but ice cream that is rapidly melting cannot be a very popular dessert. Further, electric refrigeration makes possible the manufacture of ice cream that is free from gelatin and other preservatives, that is, unless it is shipped to considerable distances.

"It has been contended that milk substitutes and butter substitutes will keep longer than milk and butter. This may not be true but it is an impression that doubtless results in a cutting of the sale of milk and butter. I have no disposition to 'knock' the substitutes. No doubt they are worth the low price that is paid for them. But electric refrigeration removes one objection (whether real or fanciful) to the use of butter and milk. With the kind of cooling now possible there is little fear that real dairy products will spoil before they are consumed. It is usually cheaper to buy butter by the full pound and this cuts our delivery costs to a slight extent. Even the smallest families can buy butter in somewhat larger amounts. There is no excuse for the use of substitutes now, if the consumer really prefers the genuine article.

"We are able to sell ice cream that is 22 per cent fat and which contains no gelatin. Our ability to 'sub freeze' depends upon electric refrigeration. And with so many homes equipped with modern cooling plants our problems are becoming further simplified.

"It cannot be claimed that we have been partial in our selection of refrigeration machines. In addition to the York and the two Frick machines in our plants, we have Frigidaire equipment in our heavy duty truck. This machine is connected with the batteries when the truck is stopped, and when the truck power is on a belt shift connects a different motor and runs the refrigeration from the same power that charges the batteries. When the truck is in our garage we connect the Frigidaire directly to the city light wires and save the batteries. We recharge our batteries at the creamery plant.

"This truck plant is set low and maintains a temperature of five degrees below zero. This refrigerator on wheels has been so effective with us that we are expecting more ice cream makers to adopt the plan."

McCORD BUILT CONDENSERS

Type "B" Spiral Fin Continuous Coil McCORD CONDENSER
The popular "bee hive" condenser designed to occupy a minimum of space. It is installed so that all air currents created by the fan pass over the coils giving great capacity with a small amount of tubing.

Type "A" Double Row Spiral Fin McCORD CONDENSER
Adapted to the larger refrigerating units used commercially and for apartment house installations. This condenser is made up of seamless, bright annealed tubing with continuous corrugated spiral fin that has made McCord condensers leaders in the field.

Type "A" Triple Row Continuous Tube McCORD CONDENSER

McCORD RADIATOR & MFG. CO
DETROIT MICH.

Taking the Electrolux to Market

Instead of waiting for the public to come to the display room, the Consumers Gas Co., Toronto, mounted two Electrolux units on a float and entered it in a parade during a recent public celebration. A Tabletop model Electrolux is plainly seen and the doors of a Hostess model, which was filled with food, are visible just back of the driver's compartment.

FRENCH DOCTORS CLAIM EXCESS DEHYDRATION MAKES BABIES CRY

A cure for crying babies in the form of electric fans blowing on blocks of ice has been suggested by two members of the French Academy of Medicine at Paris. The idea is not to reduce the temperatures of the infants to a state where they will congeal but rather, according to the doctors, the idea is to cool them off and at the same time supply the air around them with sufficient moisture to prevent them from becoming uncomfortable.

It is stated that the south wind dries out the air and affects the infants. The doctors explained that adults do not notice this pathological effect because they are stronger and their bodies remedy matters automatically. But babies cannot understand anything about "dehydration" and cannot talk so they just yell until the wind subsides or there is a change in the weather.

As a result of these experiments the ice cake-electric fan cure is suggested.

UNIQUE ROADSIDE STAND HAS ELECTRIC UNIT

H. A. Miller of Alta Moss Road near Mountain View, California, has designed and built an immense barrel 14 feet in height from which he dispenses orange juice and root beer. The success of this project has been so great that the designer will build a chain of them along the California highways and will equip each with an electric refrigeration plant for chilling the service table, which is entirely separate from the dispensing apparatus.

The barrel is built to specifications, the top being made of Oregon pine and the bats of Redwood. Electric lights attached to the under part of the top of the barrel light the exterior at night. Eight windows fold up against the inside of the barrel making it convenient to serve customers.

North American Light & Power Properties Sell 251 Units in One Week

The North American Light & Power Co., Chicago, Ill., through its subsidiaries sold 251 electric refrigerators in the "Vice-President's Week" appliance drive June 28 to July 7. The gross sales of electrical and gas merchandise for the week totaled $194,339.59.

Pueblo Leads Refrigerator Sales of Southern Colorado Power Co.

The Southern Colorado Power Co., Pueblo, Colo., reports that fifty-four electric refrigerators were sold in the territories served by them during June. A total of 377 electric refrigerators had been sold by the company since Jan. 1 and up to July 1, at which time Pueblo lead the sales with 190 units.

FRIGIDAIRE ENGINEERS ATTEND SESSIONS AT DAYTON

Frigidaire engineers, representing sales branches all over the country met in a three-day convention at Dayton, Ohio, July 18-20. R. F. Callaway, manager of branches, presided at the sessions at which commercial refrigeration and the use of Frigidaire equipment in cooling water and milk were discussed, along with other refrigeration problems.

FOREIGN SHIPMENTS OF ELECTRIC REFRIGERATORS

June Exports Reported by Bureau of Foreign and Domestic Commerce

Country of Destination	Units up to 1-Ton Capacity Number	Value
Austria	69	$ 15,111
Belgium	16	3,540
Denmark	32	5,875
France	40	8,344
Germany	10	10,017
Greece	6	550
Hungary	50	9,278
Italy	6	1,059
Netherlands	19	3,755
Norway	46	9,689
Poland and Danzig	2	930
Rumania	7	1,073
Spain	74	15,172
Sweden	14	2,661
Switzerland	20	4,953
United Kingdom	651	87,660
Canada	2,522	368,538
Costa Rica	2	715
Panama	11	3,620
Salvador	4	647
Mexico	28	10,257
Newfoundland and Labrador	2	378
Bermudas	10	2,788
Barbados	1	190
Jamaica	1	218
Trinidad and Tobago	2	1,430
Cuba	106	28,924
Dominican Republic	4	1,623
Dutch West Indies	2	825
Argentina	112	27,788
Brazil	34	6,137
Colombia	46	15,676
Ecuador	9	2,008
Peru	9	1,628
Venezuela	21	4,274
Aden	4	890
British India	110	22,804
Ceylon	2	312
China	69	11,103
Java and Madura	4	700
Hong Kong	8	2,070
Japan	29	6,711
Philippine Islands	4	1,428
Syria	6	1,150
Australia	132	21,404
New Zealand	45	7,838
British East Africa	3	672
Union of South Africa	14	4,854
Egypt	24	5,187
Total	4,473	$744,454

OPPORTUNITIES FOR FOREIGN TRADE LISTED BY DEPT. OF COMMERCE

Firms and individuals may obtain further information on the announcements listed below by applying to any one of the districts or co-operative offices of the Bureau of Foreign and Domestic Commerce. A list of the offices and their addresses appeared on page ten of the June 6 issue of ELECTRIC REFRIGERATION NEWS.

The asterisks (*) indicate that the inquirer would act as both purchaser and agent.

32649 Ice cream filling machines, automatic. (Australia).
*32565 Household electrical appliance. (France).
*32565 Electric motors, small. (France).
*32664 Refrigerators, electric. (Italy).
32644 Copper rods (Brazil).
32595 Refrigerators, electric for dairy (Venezuela).
*32711 Electric refrigerators, small (Austria).
32731 Copper bars (Cuba).
32731 Ice cream freezers (Cuba).
32728 Household electrical appliances (Czechoslovakia).
32736 Oil burners (Germany).
32737 Oil burners (Germany).

QUALITY COUNTS!

Your customer knows that a high-quality finish goes right through to construction and materials.

There is no finer finish than Ferro Porcelain Enamel. Write for booklet.

The Ferro Enamel Supply Co.
CLEVELAND, OHIO

PEERLESS FLOODED TYPE EVAPORATORS
For use on either Methyl Chloride or Sulphur Dioxide.

The PEERLESS one-piece, galvanized casting cooling unit provides the quick freezing advantage of the direct expansion unit with the hold-over advantage of the brine tank. The entire casting is cored, and ice trays are placed directly over the boiling refrigerant, giving an exceptionally short "freezing time."

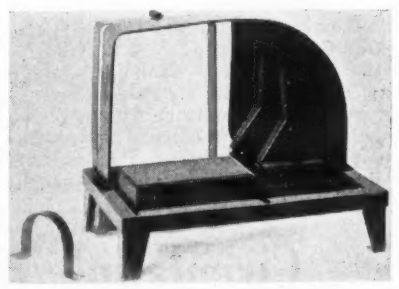
The entire surface of the unit is "cooling surface," available in maintaining correct refrigerator temperatures at a minimum power cost.

Shut-off valves are "flanged" to the float valve assembly, repairs and adjustments are made quickly with no trouble. A large capacity strainer is incorporated between the liquid shut-off valve and the "needle" valve. This can be removed and cleaned without loss of refrigerant.

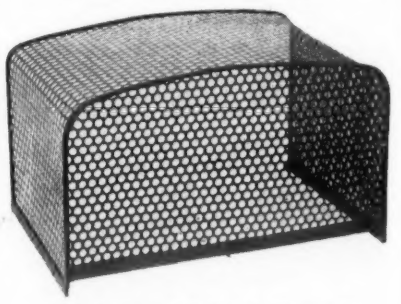
Manufactured in sizes and cube capacities to meet every condition.

PEERLESS ICE MACHINE CO.
515 W. 35th St. CHICAGO, ILL.

STAMPINGS
for Electric Refrigeration Manufacturers—Distributors—Dealers—



Compressor Supporting Base
Electrically arc-welded joints—angle iron base—durably constructed.



Perforated Metal Guard for Covering Compressors
Made of auto body steel—enameled. Unusually strong construction.

Louvered Panel Enclosure for Compressors
Frame 3/16 in. x 1½ in. x 1½ in. angle iron—electrically arc-welded joints. Covered with enameled steel louvered panels—monel trim.

Let us know your requirements and specifications for parts similar to illustrated equipment. We can vary the size and design to suit your individual need. Our prices will surprise you.

Motors Metal Mfg. Co.
DETROIT, MICH.

A Sales Manager's Views—

(1) On Overselling the Customer
(2) On Loyalty to the Manufacturer
(3) On Central Station Competition
(4) On Weekly Sales Meetings

By Roy George

SMITH'S Appliance Shop, Phoenix, Arizona, under the management of Bert Dorris, is just what the name implies. The pride of the firm lies in their showroom and the fact that they are ready at all times to demonstrate a standard article in any line of electrical equipment that may be called for.

"We are not in the contracting business," says Mr. Dorris, "and have no intention of entering any other field than the one we are in; but we do aim to cover the field of appliances in every detail and to furnish an expert service familiar with the conditions of this territory."

As an example of the special conditions referred to, the high summer temperatures may be cited as demanding something special in refrigeration; and the summer static about Phoenix undoubtedly gives rise to a special problem in radio.

"Salesmen who oversell are the worst enemies a firm can have in the field. The customer expects his machine to do just what you tell him it will do, and I believe in making this estimate a conservative one all along the line.

"That puts it up to the manufacturer."

Mr. Dorris is cold blooded in his stand as a salesman. He is an unusually aggressive type and puts more fight into his business than most men. But he makes the appliances stand on their merit.

"I hold that it is the salesman's place to stand with his prospect or his customer against the world. Loyalty is the finest of the graces and the strongest of all the bonds in the business world, bar none; but my first loyalty is to myself and the firm I manage, and to the customers that put their confidence in our integrity.

"Your customer is your client," says Mr. Dorris. "You owe it to him to get him the best you can for his money and the minute you let a false sense of loyalty bind you to the manufacturer in preference to the customer, you're sunk.

"To give you a concrete instance: We sell two kinds of electric ranges—L. & H. and Universal. When one of my salesmen sells a range, I train him to follow up the sale and see that the customer is satisfied and stays satisfied. If she finds that she can't get accustomed to the stove she has bought, we are perfectly ready to exchange it and put in one of the other kind. And if we can't possibly satisfy that customer, we are ready to give her every cent back that she paid for the range and take it off her hands.

"But we take her fight to the manufacturer.

"And I consider this the highest type of loyalty, for it is loyalty to the best interests of the business in general. I expect to sell several million dollars worth of appliances in my life and then will a good business to my son; that's why I am concerned with seeing the manufacturers kept informed with the demands of the public.

"Competition is what keeps the manufacturers on their toes, and the information they can get from the sales world is the information that enables them to beat the game. I never like to have a salesman get the habit of overselling one of our products. But I do make it a point to be completely sold on a product before I take it into our line."

Capitalize on the Power Company's Advertising

Mr. Dorris takes a legitimate pride in the fight he has made for appliance business in the face of strong competition. Every line that has been especially pushed by the local power company, he has proceeded to go after.

"The big power company advertising campaigns serve as a snow plough for the man who can get out and follow up," says Mr. Dorris. "They clear the way for the fastest sales campaigns you can put on, and the thing to do is to feature the same thing they do and go out and capture your share of the business while the public mind is alert to that particular appliance."

The zoning system is in force under the management of this shop and eight salesmen are kept thoroughly acquainted with the city of Phoenix by means of a big map hanging behind the chief's desk and a prospect file that is always under his fingers. He meets his salesmen every morning and sets them out on definite assignments. Instead of going up one side and down the other, he sends them around the block in spirals, so "they won't know a salesman's coming." And they have mighty few sales meetings.

"Salesmen dread them," says Mr. Dorris. "I am able to get everything I know across in ten minutes every morning and the rest of the time, after they're through with assignments, I expect them to be out ringing doorbells.

"I do it myself. When a man slows up, I go out into his territory and ring bells. Then, when I meet that man in the morning I have something to tell him, or else I expect him to have something to tell me. I have a lot of sales theories, but it's the daily grind with the salesmen now and then that makes me know I'm right when I am right."

Revolutionary on Sales Meetings

Mr. Dorris is radical on this matter of sales meetings and is convinced that it is badly overdone in most lines, the whole country over. He says frankly that he wants only salesmen who can work on their own initiative without such meetings, but his idea of opposition goes further than that and is based on a different idea:

"The trouble with a weekly sales meeting is that it breaks in on the good man's time—either his time of recreation or his working hours. He resents it, too. He resents it bitterly, far more than the sales manager with a head full of theories imagines."

Mr. Dorris tells the story of a school principal who once took his school teachers to task for the kind of examinations they were giving their pupils, and he laid down the rule that in the future, before an examination should be given to the pupils, the teacher should file with the principal a copy not only of the questions, but of the answers also, together with a statement as to the time it had required for the teacher to write out her answers. There were mighty few examinations given after that, and the ones that were given, kept well within the time limits imposed by the school bell. Mr. Dorris implies that, similarly, the best test of a salesmanager's theories is an occasional tour with the bell ringers.

The Smith Appliance Shop is just a clean cut example of a firm that is confining its efforts to one thing—the house to house sale of electric appliances. All such cuts as may be promised by tandem hook-ups or special sale methods are looked on with disfavor. A straight sales method, with the attack held constantly at the point occupied by his biggest competitor, is the simple policy that has brought success to the undoubtedly redoubtable Mr. Dorris.

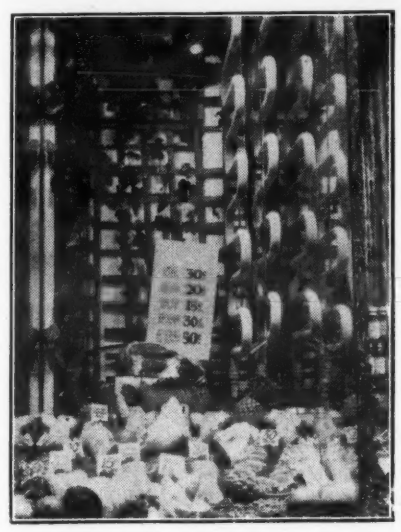
The "Hot and Cold" Idea Illustrated

Miss Nina Sherman found an ideal method of keeping cool when she curled up inside of a General Electric Refrigerator in A. C. Rogers' display room in Dallas, Texas.

DISPLAY WINDOWS HAVE REFRIGERATED SECTION

Goldberg, Bowen & Co., San Francisco, have equipped a section of one of their display windows with brine pipes, which permit the display of perishables such as meat, fruits and vegetables.

A large section of plate glass separates



the refrigerated section from the main section of the window. An overhead track and trolley system leading from the roof of the refrigerated section of the window to the refrigerators in the rear of the store permits large sections of meat to be easily transferred to this window for display.

OLD TIMERS INVITED TO CONTRIBUTE FACTS FOR HISTORICAL NUMBER

As previously announced, the September 12 issue of ELECTRIC REFRIGERATION NEWS will feature historical data regarding the early development of the industry. This issue will mark the second anniversary of the founding of the NEWS. It will be the first of Volume 3 (Serial No. 51).

One of the objectives of the "Historical Number" is to secure an accurate record of the important facts and figures concerning the organization and later growth of manufacturing companies and the different types of apparatus which have played a part in the progress of early refrigeration.

This record will not only be valuable in the future but it will also be interesting and educational to the thousands of newcomers in the field. With the passing years historical facts tend to become obscure or entirely lost. Already there are many people vitally concerned with the business who have little or no knowledge regarding the early struggles of the pioneers in refrigeration service.

Manufacturers whose history antedates the founding of this publication and whose original organization may, therefore, not have been mentioned in the news columns are urged to prepare a brief history with particular reference to the individuals responsible for starting the enterprise and the subsequent outstanding events.

Individuals who have personal knowledge of the industry's beginnings are especially urged to contribute information. Photographs of pioneers and pictures or drawings of early designs are also requested. Particular care will be taken to return any documents or original material if desired.

ELECTRO KOLD ANNOUNCES TWO WATER-COOLED UNITS

The Electro-Kold Corp., Spokane, Wash., announces two new styles of compressor units, the type A, ½ H. P., water-cooled machine, and type AA, 1 H. P., water-cooled machine. These two new models give Electro-Kold an alternative between the present types A and AA air-cooled, so that water cooling may be used when necessary. The new units will be used chiefly for commercial and apartment installations.

NORTH CAROLINA UTILITY COMPANIES NEAR CLOSE OF 26 DAY KELVINATOR CAMPAIGN

On July 30, the Southern Public Utilities Co. and the North Carolina Public Service Co., of Charlotte, N. C., subsidiaries of the Duke Power Co., Charlotte, inaugurated a special sale on Kelvinators in all the cities served by them. Attractive terms are being offered by the companies during the sale which closes Aug. 25.

Branches of both companies have been grouped into three divisions and the following quotas have been set up for them: Division No. 1—Charlotte 86, Winston-Salem 75, Greensboro 70, Greenville 57, Salisbury 50; Division No. 2—Burlington 21, Anderson 18, Hickory 17, Spartanburg 14, Hendersonville 15, Mt. Airy 12, Lenoir 12, Reidsville 11, Thomasville 10, Chester 10, Greer 10; Division No. 3—North Wilkesboro 8, Elkin 7, Belmont 6, York 4, Madison 4, Kernersville 3, Taylorville 3, Bessemer City 2, Marshville 2, Norwood, Matthews and Waxhaw 1 unit each.

Cash prizes totaling $690 will be awarded to the branches and to the individual salesmen who make the most outstanding records during the campaign.

GULF POWER CO. SELLS 65 G. E. UNITS IN TWO MONTHS

Sixty-five General Electric refrigerators were sold in the campaign staged by the Gulf Power Co., Pensacola, Fla., during the months of June and July. To promote further sales the company started on Aug. 1, an electric range and refrigerator campaign which will extend till Sept. 15. Special terms are being offered to customers and extra publicity is being planned. Attractive window displays have been prepared in all the appliance stores and range and refrigerator demonstrations will be given.

Portland Association Makes Awards for Essays on Refrigeration

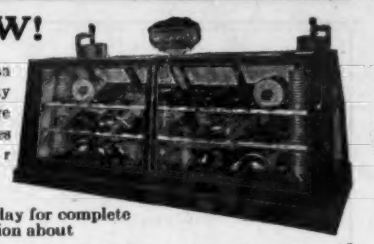
One thousand and ninety essays and 4,497 slogans were submitted in a contest recently sponsored by the Refrigeration Trades Association, Portland, Ore., and the *Portland Oregonian*. Thirty cash prizes were awarded, ranging from $100 to $5.00, fifteen of these being for the slogans and fifteen for the essays. Essays titled as follows were awarded the first three prizes: "Keep Well by Well Kept Foods"; "For Goodness Sake, Refrigerate"; "Modern Civilization Demands Refrigeration."

Westchester Lighting Co. Offers Prizes in Refrigerator Essay Contest

The Westchester Lighting Co., Mount Vernon, N. Y., is conducting an essay contest from August 1 to September 10 on the subject, "Why I Consider Automatic Refrigeration One of the Most Important Services in My Home." Every customer of the Westchester Lighting Co. and affiliated companies in whose home there is either an electric or gas refrigerator is eligible to compete in the contest.

Prizes of $50, $30, and $20 in appliances will be awarded to the winners.

NOW!



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